



Hot Case Series

SERIES: WDCG

Operation Manual



**2812 Grandview Drive • Simpsonville, SC 29680 • USA
(864) 963-3471 • Toll Free: (800) 927-6887 • Fax: (864) 963-5316**

WHAT IS COVERED	<p>This warranty covers defects in material and workmanship under normal use, and applies only to the original purchaser providing that:</p> <ul style="list-style-type: none"><input type="checkbox"/> The equipment has not been accidentally or intentionally damaged, altered or misused;<input type="checkbox"/> The equipment is properly installed, adjusted, operated and maintained in accordance with national and local codes, and in accordance with the installation and operating instructions provided with this product.<input type="checkbox"/> The serial number rating plate affixed to the equipment has not been defaced or removed.
WHO IS COVERED	<p>This warranty is extended to the original purchaser and applies only to equipment purchased for use in the U.S.A.</p>
COVERAGE PERIOD	<ul style="list-style-type: none"><input type="checkbox"/> Warranty claims must be received in writing by BKI within one (1) year from date of installation or within one (1) year and three (3) months from date of shipment from the factory, whichever comes first.<input type="checkbox"/> COB Models: One (1) Year limited parts and labor.<input type="checkbox"/> COM Models: Two (2) Year limited parts and labor. COM convection ovens also have a two (2) year door warranty.<input type="checkbox"/> Warranty period begins the date of dealer invoice to customer or ninety (90) days after shipment date from BKI, whichever comes first.
WARRANTY COVERAGE	<p>This warranty covers on-site labor, parts and reasonable travel time and travel expenses of the authorized service representative up to (100) miles round trip and (2) hours travel time and performed during regular, weekday business hours.</p>
EXCEPTIONS	<p>Any exceptions must be pre-approved in advance and in writing by BKI.</p>
EXCLUSIONS	<ul style="list-style-type: none"><input type="checkbox"/> Negligence or acts of God,<input type="checkbox"/> Thermostat calibrations after (30) days from equipment installation date,<input type="checkbox"/> Air and gas adjustments,<input type="checkbox"/> Light bulbs,<input type="checkbox"/> Glass doors and door adjustments,<input type="checkbox"/> Fuses,<input type="checkbox"/> Adjustments to burner flames and cleaning of pilot burners,<input type="checkbox"/> Tightening of screws or fasteners,<input type="checkbox"/> Failures caused by erratic voltages or gas suppliers,<input type="checkbox"/> Unauthorized repair by anyone other than a BKI Factory Authorized Service Center,<input type="checkbox"/> Damage in shipment,<input type="checkbox"/> Alteration, misuse or improper installation,<input type="checkbox"/> Thermostats and safety valves with broken capillary tubes,<input type="checkbox"/> Freight - other than normal UPS charges,<input type="checkbox"/> Ordinary wear and tear,<input type="checkbox"/> Failure to follow installation and/or operating instructions,<input type="checkbox"/> Events beyond control of the company.
INSTALLATION	<p>Leveling, as well as proper installation and check out of all new equipment - per appropriate installation and use materials – is the responsibility of the dealer or installer, not the manufacturer.</p>
REPLACEMENT PARTS	<p>BKI genuine Factory OEM parts receive a (90) day materials warranty effective from the date of installation by a BKI Factory Authorized Service Center.</p>

Warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on the manufacturer's part. BKI shall in no event be liable for any special, indirect or consequential damages, or in any event for damages in excess of the purchase price of the unit. The repair or replacement of proven defective parts shall constitute a fulfillment of all obligations under the terms of this warranty.

BKI Worldwide, Inc. is a wholly owned subsidiary of Standex International Corporation.

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Introduction

NOTICE

PLEASE READ THIS ENTIRE MANUAL BEFORE SERVICING THE UNIT. If you have any questions, contact the BKI Technical Service Department, toll free: 1-800-927-6887. Outside the U.S., call 1-864-963-3471.

This unit is to be sealed to the floor after installation to conform to NSF requirements. (Dow Corning RTV #732 Multi purpose Sealant.)

Congratulations on your purchase of a BKI® WDCG Hot Case.

Safety Precautions

Always follow recommended safety precautions listed in this manual. Below is the safety alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury or property damage.



Safety Signs and Messages

The following Safety signs and messages are placed in this manual to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs, and messages. Damage to the equipment, death or serious injury to you or other persons may result if these messages are not followed.

⚠ DANGER

This message indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

This message indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

⚠ CAUTION

This message indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This message is used when special information, instructions or identification are required relating to procedures, equipment, tools, capacities and other special data.

Specific Precautions

⚠ CAUTION Equipotential Ground Plane

When a high current flows through a conductor, differences in potential appear between the conductor and nearby metallic surfaces near the appliance. As a result, sparks may be produced between the appliance and surrounding metal surfaces. These sparks could cause serious injury, damage, or fire.

BKI provides an Equipotential ground terminal for the connection of a bonding conductor after the installation of the appliance per IEC60417-1. This terminal is located on the inside of the Power Entry Supply box near the Earth connection and is marked with this symbol.



Safe Work Practices



Beware of High Voltage

This equipment uses high voltage. Serious injury can occur if any untrained or unauthorized person installs, services, or repairs this equipment. Advise your customer to always use an Authorized Service agent to Service this Equipment



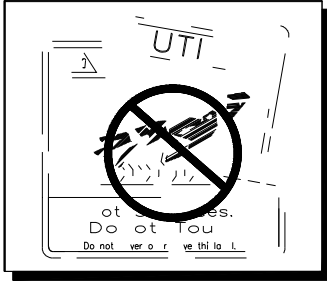
Your Customer Should have an Operators Manual

The operators manual is an important part of this equipment. Your customer should keep it near for easy access.

If your customer needs a replacement operators manual, contact:

BKI

Technical Services Department
2812 Grandview Drive
Simpsonville, S.C. 29680
Or call toll free: 1-800-927-6887
Outside the U.S., call 864-963-3471



Safety Labels Must be Clean and in Good Condition

Make sure all safety labels are in place, clean and in good condition. Replace any damaged or missing safety labels.

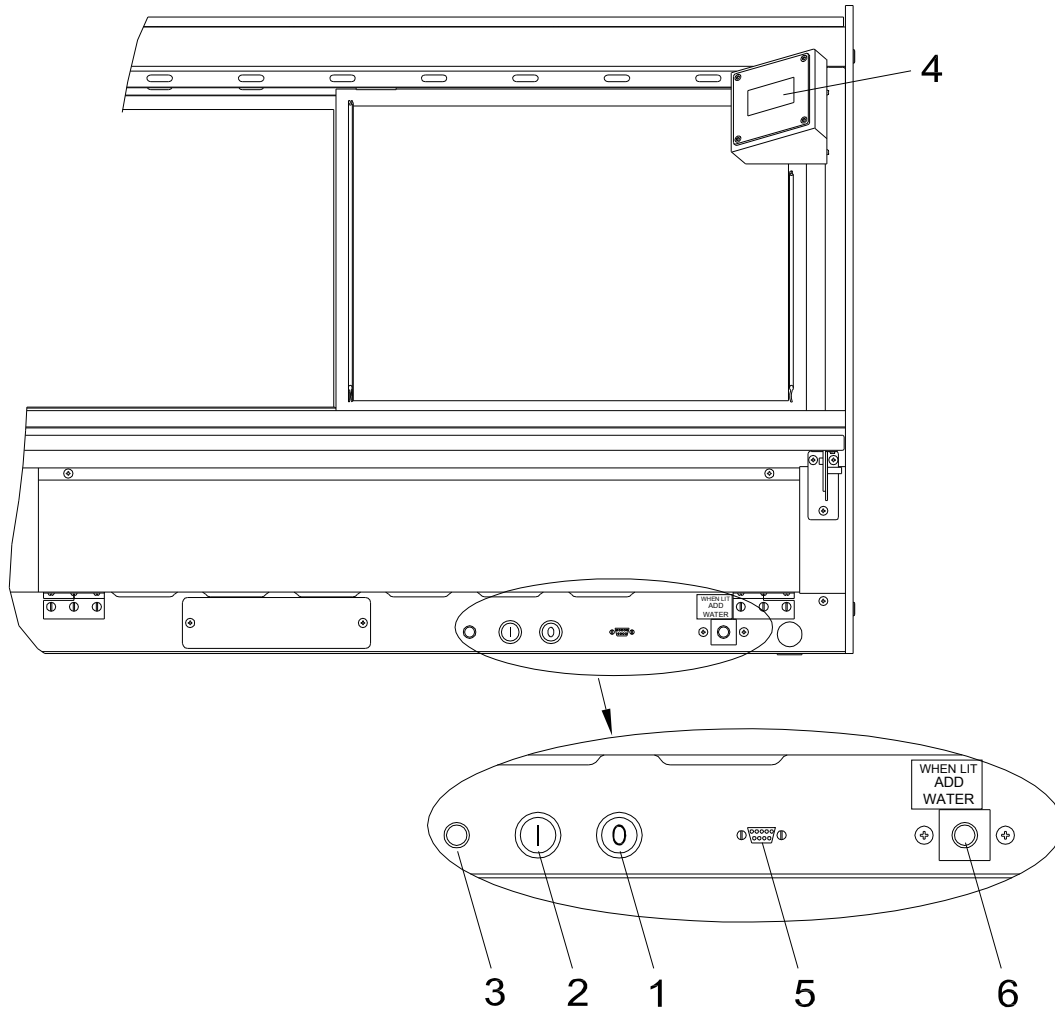
If you need new safety labels, contact:

BKI
Technical Services Department
2812 Grandview Drive
Simpsonville, S.C. 29680
Or call toll free: 1-800-927-6887
Outside the U.S., call 864-963-3471

Operation

Controls and Indicators

The deli case controls are shown in the figure below. The pushbutton switches turn the power supply to the case on and off. The touchscreen interface is used to operate the case and display temperatures.



Hardware Controls

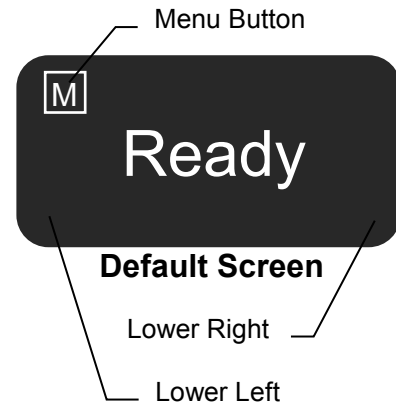
Item #	Description	Function
1	Power OFF Switch	Depressing the switch turns power OFF to the entire unit.
2	Power ON Switch	Depressing the switch turns power ON to the entire unit. When the unit is ON the touchscreen controller is powered & the lights illuminate.
3	Main Power Isolator Light	This light illuminates to indicate that power is being applied to the unit from the main power isolator (circuit breaker).
4	Analog Touchscreen Interface	Used for the operation of the unit and to measure & record product temperatures.
5	Controller RS-232 Interface	Allows user to download saved product temperatures to a laptop PC using the supplied software. Optional food probe required.
6	Water Level Indicator	(Optional) This light illuminates when the water level in the optional humidity water pan is low to indicate to add more water to the pan.

Software Controls - Default Screen

The Default Screen appears on the touchscreen during normal operation. The screen shows the menu button and the heating status of the unit.

When the unit is first powered up, "Warming" will be displayed. When the unit reaches operating temperature, "Ready" will be displayed as shown at the right.

If the display does not change from "Warming" to "Ready" after 45 minutes there is a problem with the unit. A qualified BKI service representative should be contacted.



Software Controls - Viewing Settings

The current heater settings can be viewed by touching the Menu Button [M] on the Default Screen. The Menu Screen will then be displayed.

To view the current settings for either Well Temp or Upper Heater touch the appropriate button on the Menu Screen. The View Setting Screen for the selected heaters will be displayed.

To return to the Default Screen, touch the Exit Button [X].

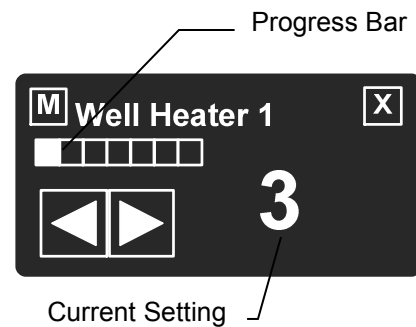
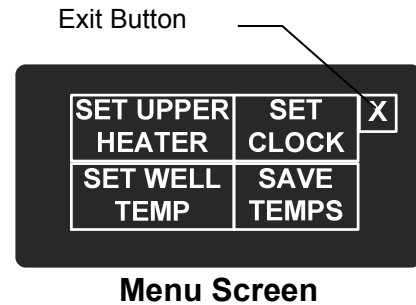
If the controller is configured to control each well position independently the View Setting Screen as shown at right will be displayed. Use the left and right arrows to display the heater setting for the various well positions of the unit. The progress bar gives a visual representation of the well location for which the setting is being displayed.

The current heater setting is displayed on the right side of the screen. The setting is a numeric value between 1 and 10 where 10 is the hottest setting.

If the controller is configured to control all of the well positions at the same setting, the progress bar will be solid and the left and right arrows will not be displayed. The setting shown will be for the heaters at all of the well positions.

To return to the Menu Screen, touch the Menu Button [M]. To return to the Default Screen, touch the Exit Button [X].

Touching [Set Clock] on the Menu Screen will display the time and date. To return to the Menu Screen, touch the Menu Button [M]. To return to the Default Screen, touch the Exit Button [X].



Software Controls - Programming the

Controller

There is a unique set of touches to enter the programming mode. This prevents the case settings from being inadvertently changed.

Enter the programming mode from the Default Screen by touching the lower left of the touchscreen, then the lower right and then the Menu Button **[M]** in that order. The Menu Screen will then be displayed.

To edit the current settings for either Well Temp or Upper Heater touch the appropriate button on the Menu Screen. The Edit Setting Screen for the selected heaters will be displayed.

To return to the Default Screen, touch the Exit Button **[X]**.

If the controller is configured to control each well position independently the Edit Setting Screen as shown at right will be displayed. Use the left and right arrows to display the heater setting for the various well positions of the unit. The progress bar gives a visual representation of the well location for which the setting is being displayed.

The current heater setting is displayed on the right side of the screen. Use the up and down arrows to edit the heater setting. The setting is a numeric value between 1 and 10 where 10 is the hottest setting.

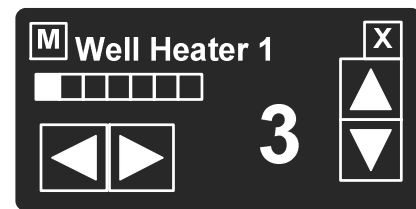
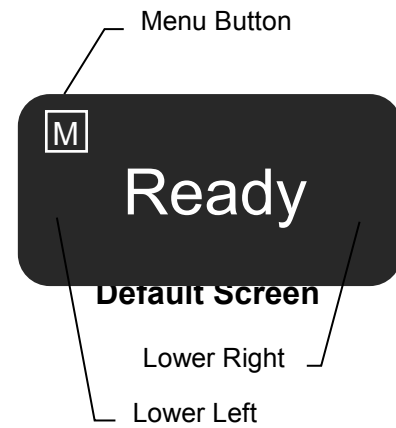
If the controller is configured to control all of the well positions at the same setting, the progress bar will be solid and the left and right arrows will not be displayed. Use the up and down arrows to edit the heater setting for all of the well positions.

To return to the Menu Screen, touch the Menu Button **[M]**. To return to the Default Screen, touch the Exit Button **[X]**.

To edit the controller time and date settings touch **[Set Clock]** on the Menu Screen while in the program mode. The time and date will need to be reset if the power supply to the case has been disconnected.

Use the left and right arrows to move the cursor under the value to be edited. Use the up and down arrows to edit the value. Continue until the current date and time is displayed.

To return to the Menu Screen, touch the Menu Button **[M]**. To return to the Default Screen, touch the Exit Button **[X]**.



Edit Settings Screen

Preheating

You should allow the equipment to preheat at the programmed temperature settings for a minimum of 30 minutes before loading it with product. For initial start up, program the controller for each well heater to a setting of 7 and each upper heater to a setting of 5.

If equipped with the optional humidity water pan, fill the pan with 6 quarts (5 1/2 liters) of water before preheating the equipment.

Check Federal and State Health and Sanitation Regulations for internal temperature required for holding cooked foods for sale. Maintaining these temperatures often tend to allow continued cooking of certain products. Therefore, smaller amounts of bulk foods should be displayed at non-peak periods and the warmer refilled as needed.

All meats and vegetables should be preheated to 160°F (70°C). before being placed in the case.

A screen liner can be used in the bottom of the display pans that are used for holding meats. This will keep meats from sticking to the bottom of the pans.

Temperature Adjustment

After placing the product into the equipment, it may be necessary to adjust the programmed settings in order to maintain the proper internal temperature for the product on display. The optional built-in product temperature probe or a portable meat thermometer should be used to read the internal temperature of each product. The programmed settings should be set to the lowest possible number that will maintain the proper product temperature.

Operational Guidelines

Keep the optional built-in product temperature probe or a portable meat thermometer on hand. Check the food temperatures hourly.

Rotate the food products. Foods loaded in first should be served first as much as is practical.

Foods held for long periods of time are more difficult to maintain at proper temperature. Also, freshness and product quality diminish if foods are held too long. Most areas of the country have sanitation regulations governing how long foods can be held. Make certain to check with your local authorities.

If equipped with the optional humidity water pan, add 4 quarts (4 liters) of water to the water pan when the "Add Water" indicator lamp illuminates. If equipment has the remote water fill tube on the back of the counter top add water through this tube. Otherwise, it will be necessary to remove a food pan above the water pan to add water.

Unit Shutdown

Remove all food pans holding the food product from the equipment. Depress the **OFF** pushbutton switch to turn the power to the heaters and lights off. After the temperature has cooled below **120°F (50°C)**, remove any residue from the wells and clean the equipment thoroughly.

Installation

WARNING

Serious injury, equipment damage or death could result if attempting to install this unit yourself. Ensure that an authorized BKI service agent installs the unit.

Unpacking and Handling

The company taking delivery of this equipment is responsible for filling all freight claims with the delivering truck line. Inspect all cartons and crates for damage as soon as they arrive. If damage to cartons or crates is found, or if a shortage is found, note this on the bill of lading (all copies) prior to signing.

If damage is found when the equipment is opened, immediately call the delivering truck line and follow up the call with a written report indicating concealed damage to your shipment. Ask for an immediate inspection of your concealed damage item. Packaging material **MUST** be retained to show the inspector from the truck line.

WARNING

Do not walk on top of deli cases or damage to the cases and serious personal injury could occur. The cases are not structurally designed to support excessive external loading such as the weight of a person. Do not place heavy objects on the deli cases.

Move the deli case as close as possible to its permanent location before moving the case off of the shipping pallet. Shipping braces are installed on each end of the deli case. Leave these braces in place while moving and leveling the deli case.

Make certain there are no separately packed accessories before discarding packaging.

During shipment, the lubricant in the gas springs may have settled. This can cause the glass not to remain open in the raised position. To avoid this, fully raise and lower the glass manually 4 or 5 times.

NOTICE

This unit is designed to be sealed to the floor after it is installed – to conform to NSF Standard 4. Use Dow Corning RTV # 732 Multi-purpose Sealant.

Floor Model

Leveling

Deli cases must be installed level to insure proper operation and alignment to adjoining equipment. Use a carpenter's level as shown in Figure 1. Begin lineup leveling from the highest point of the store floor.

1. Level the case using the leg levelers at the corners of the case (Figure 1).
2. Raise the low end of the case, do not lower the high end.
3. Check for level side-to-side and front-to-back.
4. If you are installing adjoining cases, position the next case in line beside the level case and proceed to the next step.
5. Level this case in the same manner.
6. When level, bolt the two cases together at the locations shown in Figure 1.

NOTE: None of the end components shown in Figure 2 should be attached to adjoining case ends

If the cases have been properly leveled, the front panels and counter tops should align with a small, uniform gap between the front panels of the two cases.

7. Proceed in the same manner until all the cases in the line are level and bolted together.

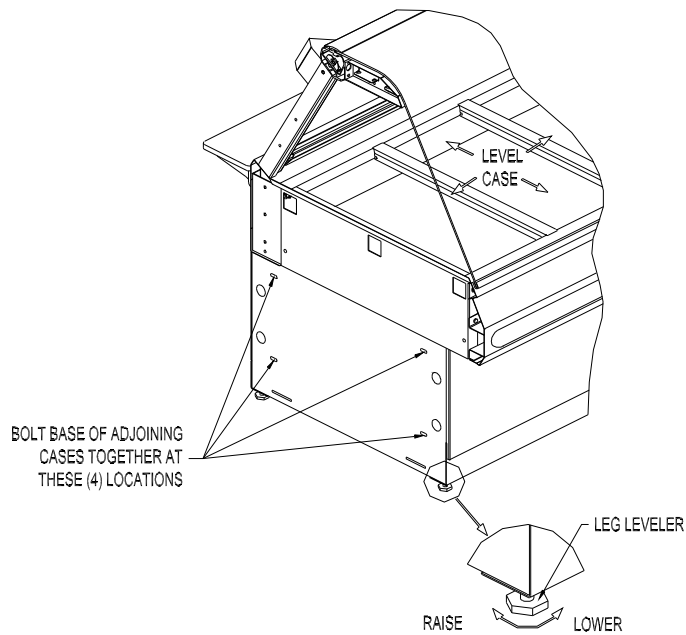


Figure 1. Floor Models - Leveling

Kick Plate Mounting

A black vinyl-covered kick plate is provided for the front, back and ends of each case.

1. In order to install the Kick Plates it will be necessary to remove the End Trim Panels (see Figure 2). Remove the retaining nuts located inside the base with a 3/8" wrench. From outside of the case pull the End Trim Panels away from the case.
2. Slide the front kick plate (the wider of the two) behind the lower finished front panel of the case (see Figure 2).
3. Make certain that the ends of the kick plate are flush with the ends of the lower finished front panel and that the kick plate is flush to the floor.
4. Drill 5/32" diameter holes in the case base to match the pre-drilled holes in the kick plate.
5. Attach the kick plate to the case base with the black sheet metal screws provided.
6. Mount the back kick plate to the case in the same manner.
7. Set the End Kick Plates into position on the ends of the case flush with the floor (see Figure 2).

NOTE: There are left and right hand End Kick Plates. The longer end flange faces toward the front of the case with the black side out. The End Kick Plates fit over the ends of the front and back kick plates and flush to the floor.

8. Carefully slide the End Trim Panels back into position on the case and push and reinstall the retaining nuts.
9. This unit is designed to be sealed to the floor after it is installed – to conform to NSF Standard 4. Use Dow Corning RTV # 732 Multi-purpose Sealant or equivalent silicone sealant to seal the Kick Plates to the floor around the full perimeter of the case.

End Panel Mounting

Attach the End Panels to the ends of the case(s) as shown in Figure 2 using the shoulder screws provided. For Glass End Panels only, slide the plastic bushings provided over the shoulder screws before inserting the screw into the glass panel. Be careful that the screws do not bind in the holes in the glass panel.

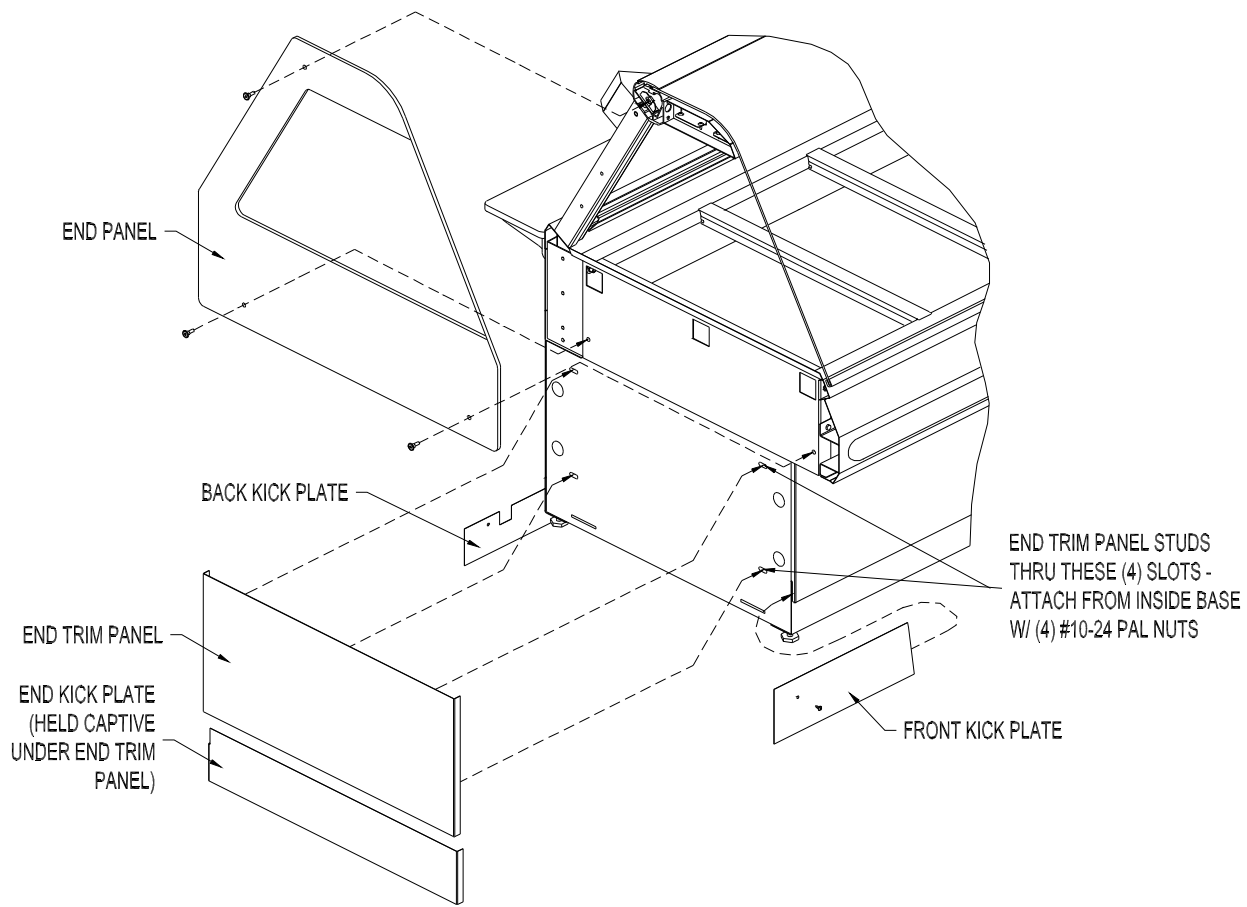


Figure 2. Floor Model - End Kick Plate & End Panel Mounting

Pedestal Model

Leveling

Deli cases must be installed level to insure proper operation and alignment to adjoining equipment. Use a carpenter's level and begin leveling from the highest point of the store floor.

1. Level the case using the leg levelers at the corners of the pedestals (see Figure 3).
2. Raise the low end of the case to level it, do not lower the high end.
3. Check for level side-to-side and front-to-back.

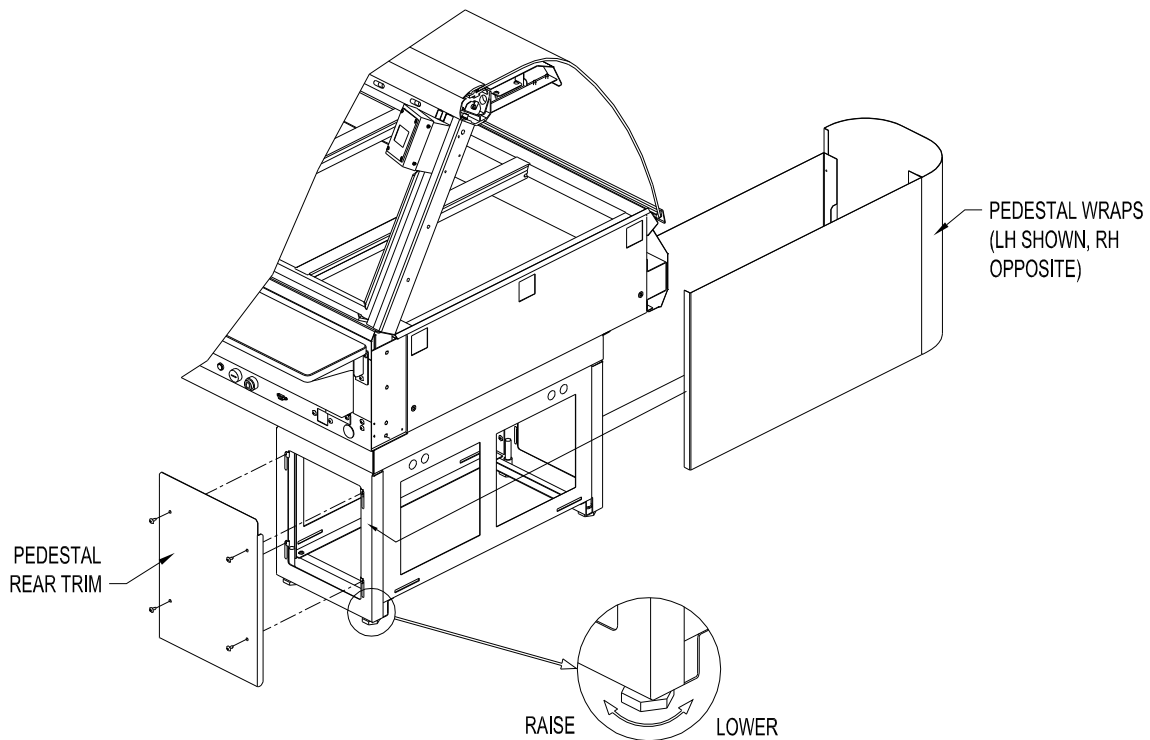


Figure 3. Pedestal Model - Leveling and Cover Attachment

Pedestal Wrap Installation

1. Remove the Rear Trim from the back of each Pedestal by removing the (4) retaining screws on each Rear Trim.
2. Spread the side panels of the Pedestal Wraps apart far enough to fit around Pedestal and slide the Pedestal Wrap around the Pedestal from the front as shown in Figure 3. Make certain the Pedestal Wrap fits flush to the floor.

NOTES: There are left and right hand Pedestal Wraps. The taller side panel on each Pedestal Wrap is oriented to the end of deli case.

The short return flange on the front of each Pedestal Wrap side Panel will insert into the large cut out in the front of the Pedestal. The back flange of each Pedestal Wrap side Panel will wrap around the back of the Pedestal.

- Place the Rear Trim in position on the back of each Pedestal. The Pedestal Wraps fit inside of the side flanges of the Rear Trim. Thread the Rear Trim retaining screws into the J nuts on the Pedestal. Make certain the Rear Trim is flush with the floor and tighten the retaining screws. The Pedestals are to be sealed to the floor if required by local health codes. Seal the pedestal covers to the floor using a silicone-type sealant (Dow Corning RTV #732 or equivalent).

End Panel Mounting

Attach the End Panels to the ends of the case(s) as shown in Figure 2 using the shoulder screws provided. For Glass End Panels only, slide the plastic bushings provided over the shoulder screws before inserting the screw into the glass panel. Be careful that the screws do not bind in the holes in the glass panel.

Counter Model

Counter Mounted cases must be mounted on a level surface that can support the weight of the case and its contents. Use a carpenter's level as shown in Figure 1 to level the case.

These cases are to be sealed to the counter if required by local health codes. Seal the perimeter of the case to the counter using a silicone-type sealant (Dow Corning RTV #732 or equivalent).

Attach the End Panels to the ends of the case as shown in Figure 2 using the shoulder screws provided. For Glass End Panels only, slide the plastic bushings provided over the shoulder screws before inserting the screw into the glass panel. Be careful that the screws do not bind in the holes in the glass panel.

Front Glass Adjustment



During shipment, the lubricant in the gas springs may have settled. This can cause the glass not to remain open in the raised position. To avoid this, fully raise and lower the glass manually 4 or 5 times

Alignment of the front glass(es) may change during shipment and installation. After the case is in its final location and leveled check the distance between the ends of the glass(es) and the end panels.

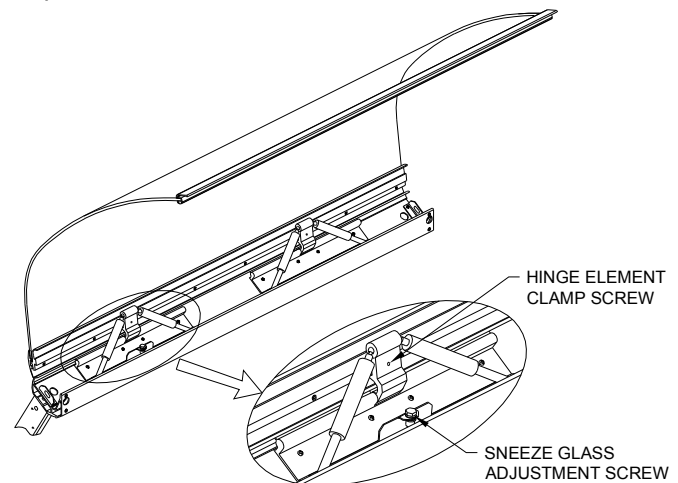
On single front glass cases the distance between each end of the glass and the end panels should be the same.

On cases with two front glasses the space at the joint between the two glasses and the distance between the glass ends and the end panels should all be the same.

The front glass spacing can be adjusted by raising the front glass(es) and loosening the hinge element clamp screws on all of the front glass hinge elements using a 4 mm hex wrench. (Refer to the illustration on the right.)

Move the glass as required and tighten the clamp screws. Close the front glass(es) to verify the spacing. If necessary repeat the procedure above until the proper glass alignment is achieved.

The height of the partial sneeze glass on self-service cases can be adjusted using the adjustment screw(s) located in front of the glass hinge element(s). Raise or lower the screw to make the top of the sneeze glass horizontal or align it with adjoining glasses.



Wiring

A wiring diagram for the specific model is shipped with the deli case. The wiring diagram provides electrical specifications, an electrical schematic and a parts list. Refer to this wiring diagram and the deli case serial number plate for electrical information.

Field wiring must be sized for the components amperes printed on the serial number plate. Actual ampere draw may be less than specified.

All electrical connections should be in compliance with the NEC and all applicable local codes by a licensed electrician. Refer to the wiring diagram furnished with your case for the electrical specifications.

The power supply connection is located on the bottom or back of the well compartment of the case (see Figure 4). A $\frac{3}{4}$ " knockout is provided at each location for the required conduit connection. A second power supply connection for the oven is provided on oven combo cases.

A wiring cutout is provided in the base bottom pan on floor model cases (see Figure 5). Refer to the case specification sheet for the location of this cutout. Remove the cover over the wiring cutout and route the wiring through the cutout. Cut a hole of the proper size and location in the cover for the conduit to pass through and reinstall the cover.

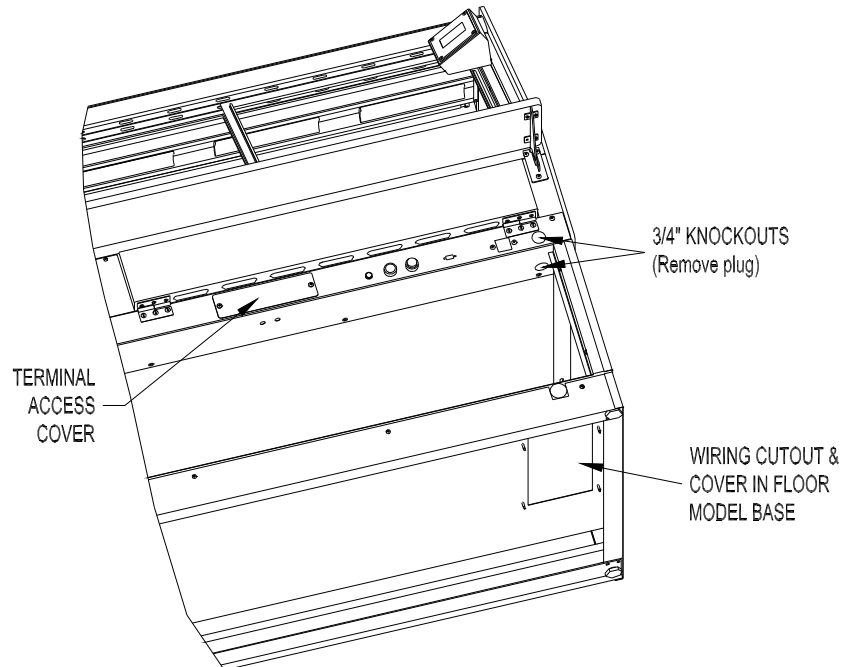


Figure 4. Wiring Access

Case Joining Trim

1. After leveling the cases and bolting the bases together, bolt the canopies together as shown in Fig. 6 with a 1/4"-20 x 3/4" Hex Head Screw and Keps Nut.
2. Mount the Upper Front & Base Front Joint Trims by holding them in place and marking the hole locations on the case.
3. Make certain the joint covers are centered on the joint and that they align vertically with each other.
4. Drill the case holes 5/32" and attach joint covers with screws provided. Before tightening the top screws of the Upper Front Trim, slide the Counter Front Trim in place between the screw head and the Upper Front Trim.
5. Apply a bead of silicone sealant inside the Counter End Joint Cover and slide the cover over both counter end walls. Apply a bead of silicone sealant to seal the open front of the Counter End Joint Cover.
6. Attach Bumper Ends and Bumper Mounting Base to the front of the cases, centered on the vertical surface of the upper front of the case. Cut the Bumper Top to length to fit between the Bumper Ends and snap into place.

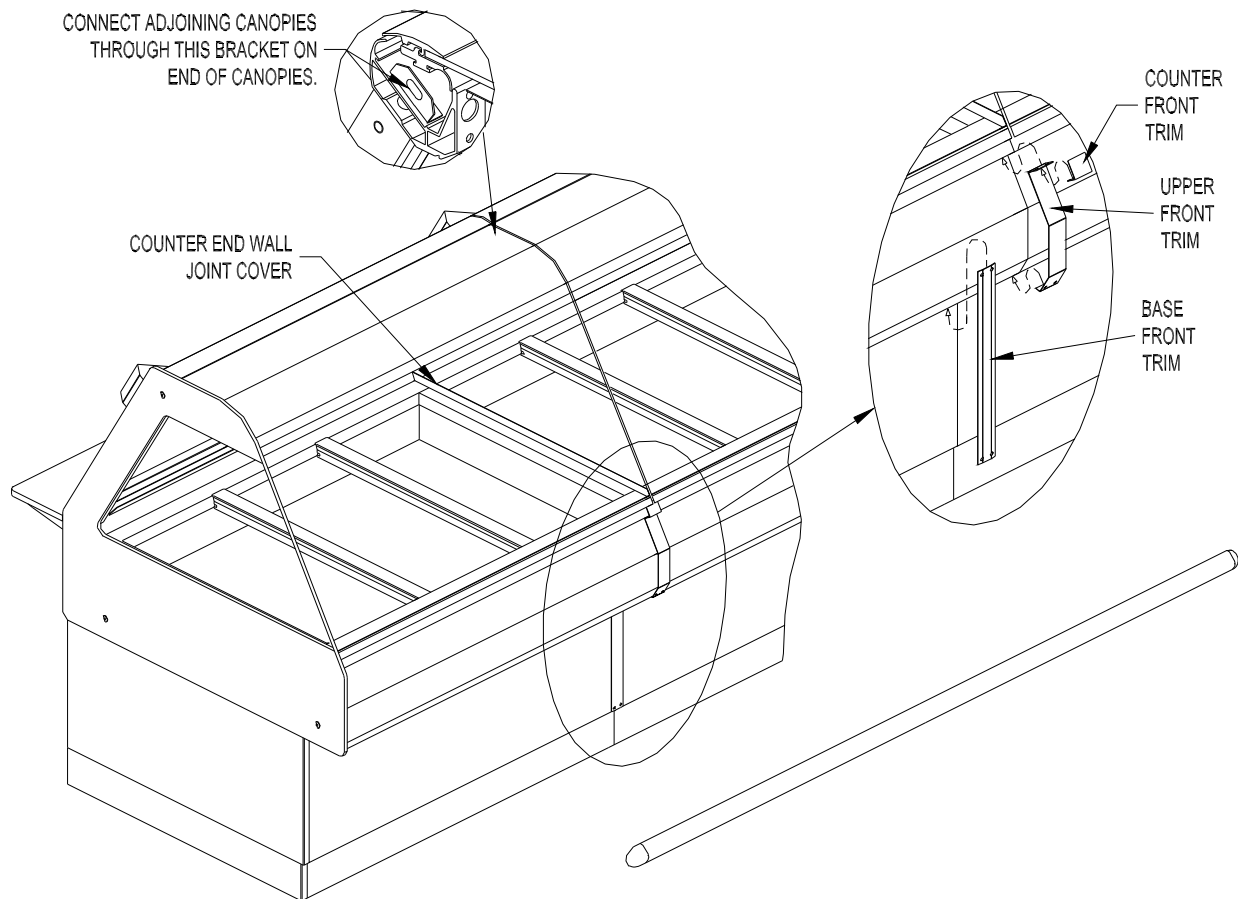


Figure 5. Joining Cases

Case Divider Glass

A Divider Glass is typically installed between a self-service case with reach-in front glass and a full service case with full front glass. The Divider Glass is installed on the full service case side of the joint.

1. Mount the Upper Glass Retainer by first removing the outer (2) retaining screws from the canopy heater reflector on the end of the deli case the Divider Glass is being installed. Insert the screws through the outer set of holes in the Upper Glass Retainer (see Figure 6) and attach the Upper Glass Retainer to the canopy.
2. Place the Lower Glass Retainer in position against the inside of the counter end wall on the end of the deli case the Divider Glass is being installed. The side of the Lower Glass Retainer with (2) vertical walls is placed against the counter end wall.
3. Apply a bead of silicone sealant inside the Counter End Joint Cover and slide the cover over both counter end walls and the Lower Glass Retainer. Apply a bead of silicone sealant to seal the open front of the Counter End Joint Cover.
4. Slide Divider Glass in place through the Upper and Lower Glass Retainers.

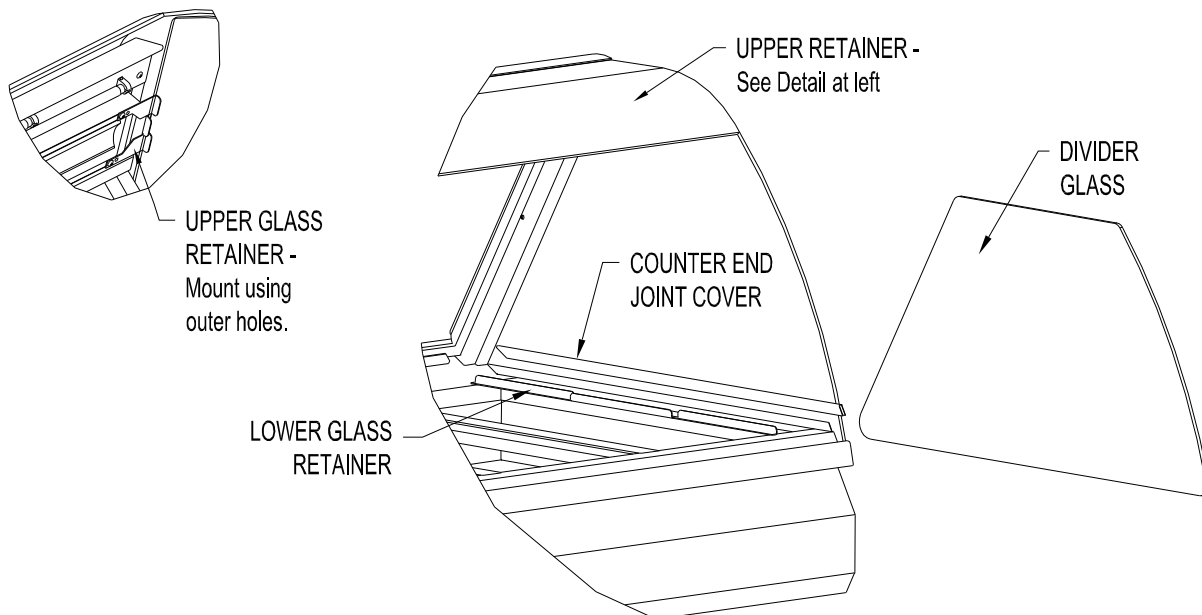


Figure 6. Divider Glass Installation

Maintenance

CAUTION

Failure to comply with the maintenance below could result in a serious accident.

WARNING

Electrocution, equipment failure or property damage could result if an unlicensed electrician performs electrical repair. Ensure that a licensed electrician perform electrical repair.

Scheduled Maintenance

Use the following table to help manage scheduled maintenance activities.

Frequency	Performed By	Part	Activity
Daily	User	Case	Clean the entire Case. Refer to the cleaning procedure below.

Cleaning

This unit should be cleaned at the end of each day. Use the following procedure:

DANGER

Failure to remove power from this unit may cause severe electrical shock. This unit may have more than one disconnect switch.

1. Turn the machine 'off' and allow it to cool down.
2. Remove any food pans.

CAUTION

Using abrasive cleaners may damage the cabinet finish. Use only a mild soap and water solution.

Never steam clean or get excess water in the interior of the cabinet as this can damage unit.

This appliance is not intended to be cleaned with a water jet.

3. Use a mild soap and water solution to clean parts.
4. Sponge the inside and outside with a mild soap and water solution.
5. Wipe the parts and cabinet dry with a soft, clean cloth.

Well Numbering Convention

Facing the case from the Customer side, Well 1 is on the far right-hand end of the case. The well number increase sequentially from right to left.

Troubleshooting

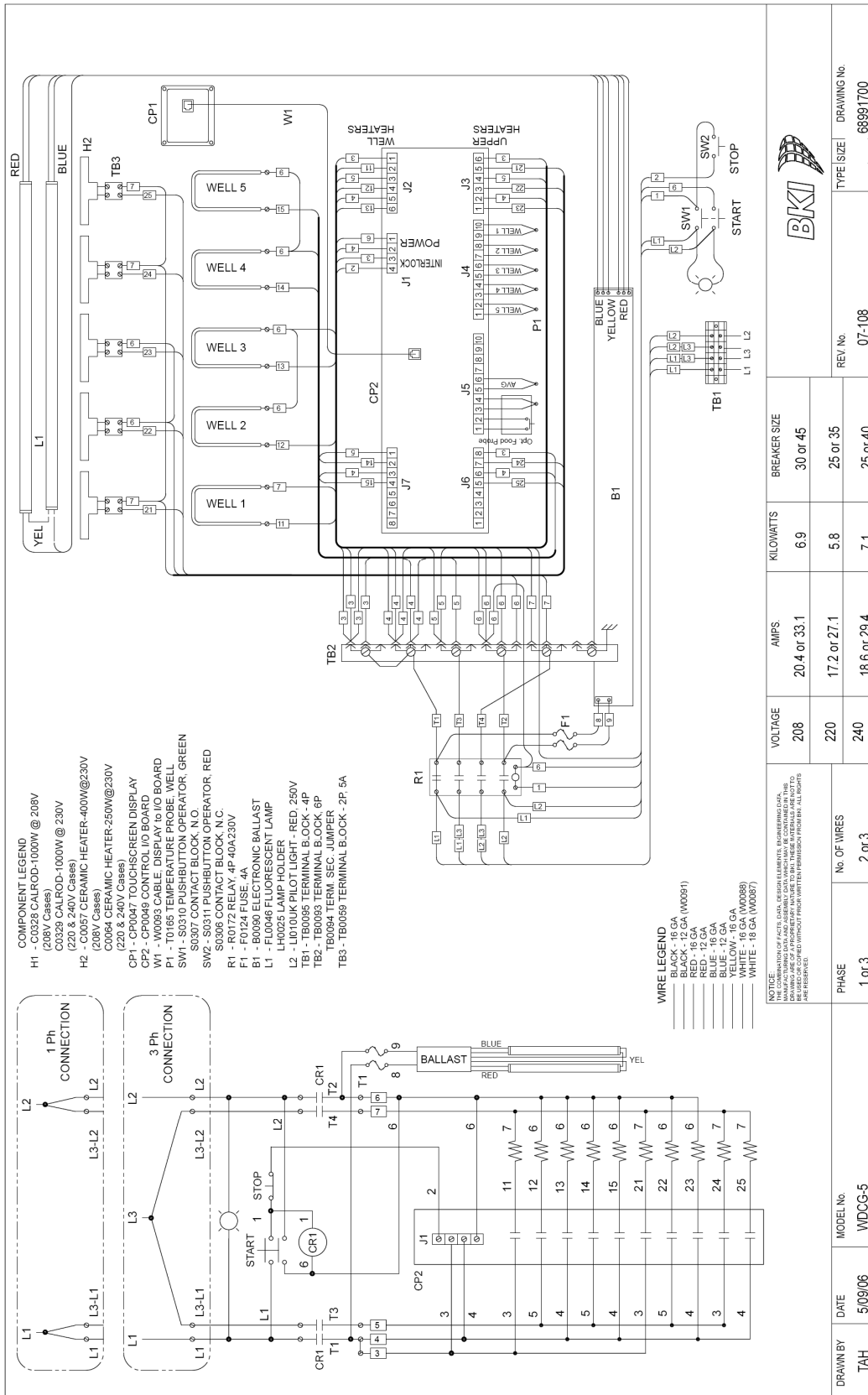
Refer to the table below for troubleshooting information.

Disconnect the case power supply by turning OFF the circuit breaker in the power supply service panel before performing any diagnostic testing.

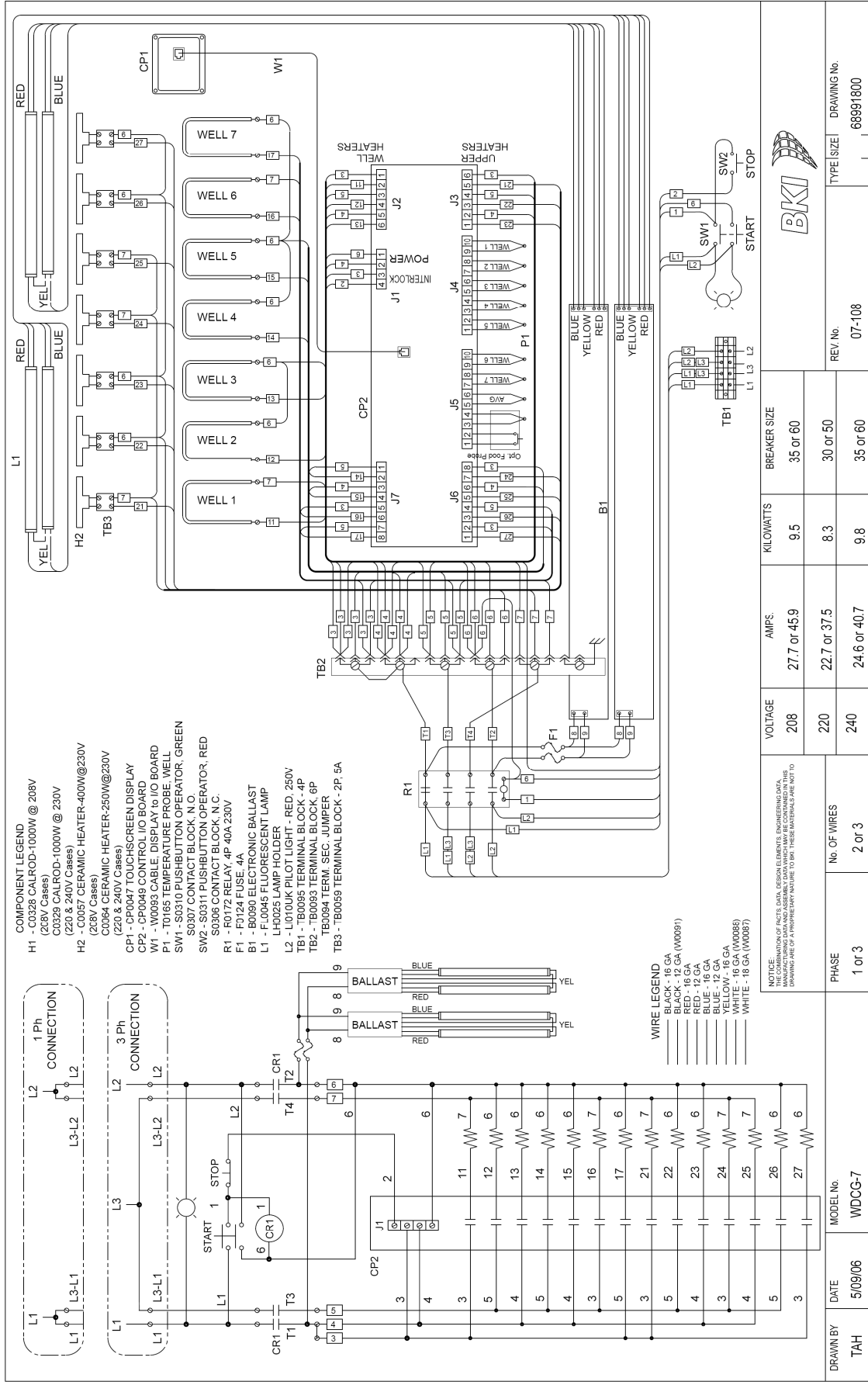
Problem	Cause	Possible Solution
Case Not Operating (Clear pilot light not illuminated)	No Power to the case.	Check circuit breaker or fuses at building power panel.
Case Not Operating (Clear pilot light illuminated)	Power switch is off.	Reset the power switch.
	Control Safety Interlock circuit has shut case off because one of the well temperature probes reached a preset value.	Failed temperature probe, temperature probes not connected to control in proper sequence, well heating elements not connected to control in proper sequence.
Holding Temperature Not Adequate	Case and food pans have not been preheated.	Refer to the preheating section of Operators Manual.
	Product is below 160° F when loaded into case.	Check product temperature before loading the case.
	One or more heating elements not operating properly.	Troubleshoot as described below.
Individual Heating Element Not Heating	Loose wire or bad connection.	Identify and repair wire connection.
	Failed Heating Element.	Replace failed Heating Element.
	Failed Output on Control Board.	Replace entire Control Board.
Control displays PL# and beeps every second (# specifies number problem well).	Probe low, shorted. Measured temperature < 40°F.	Replace failed temperature probe for specified well.
Control displays PH# and beeps every second (# specifies number problem well).	Probe high, open. Measured temperature > 550°F.	Replace failed temperature probe for specified well.
PL and PH messages can appear shortly after case is turned ON.		
Control displays TL# and beeps every second (# specifies number problem well).	Temperature low, well probe temperature more than 25°F below set point.	Loose wire, failed heating element, failed controller.
Control displays TH# and beeps every second (# specifies number problem well).	Temperature high, well probe temperature more than 40°F above set point.	
TL and TH messages will not appear until after the 20 minute stabilization period.		

Touch Screen Display Not Functioning (Properly)	Damaged communication cable.	Replaced damaged cable.
	Failed Control Touch Screen Display.	Replace failed Control Touch Screen Display.
	Failed Control I/O Board.	Replace failed Control I/O Board.
Light Bulb(s) Do Not Illuminate when Power is turned On	Failed Light Bulb(s)	Replace failed Light Bulb(s)
	Fuse(s) Blown	Locate and correct cause, then replace blown fuse(s).
	Failed Ballast	Replace failed Ballast

Wiring Diagrams



DRAWN BY	DATE	MODEL No.	PHASE	No. of WIRES	VOLTAGE	AMPS	KILOWATTS	BREAKER SIZE	TYPE SIZE	DRAWING No.
TAH	5/09/06	WDCG-5	1 of 3	2 or 3	208	20.4 or 33.1	6.9	30 or 45	07-108	68991700
					220	17.2 or 27.1	5.8	25 or 35		
					240	18.6 or 29.4	7.1	25 or 40		



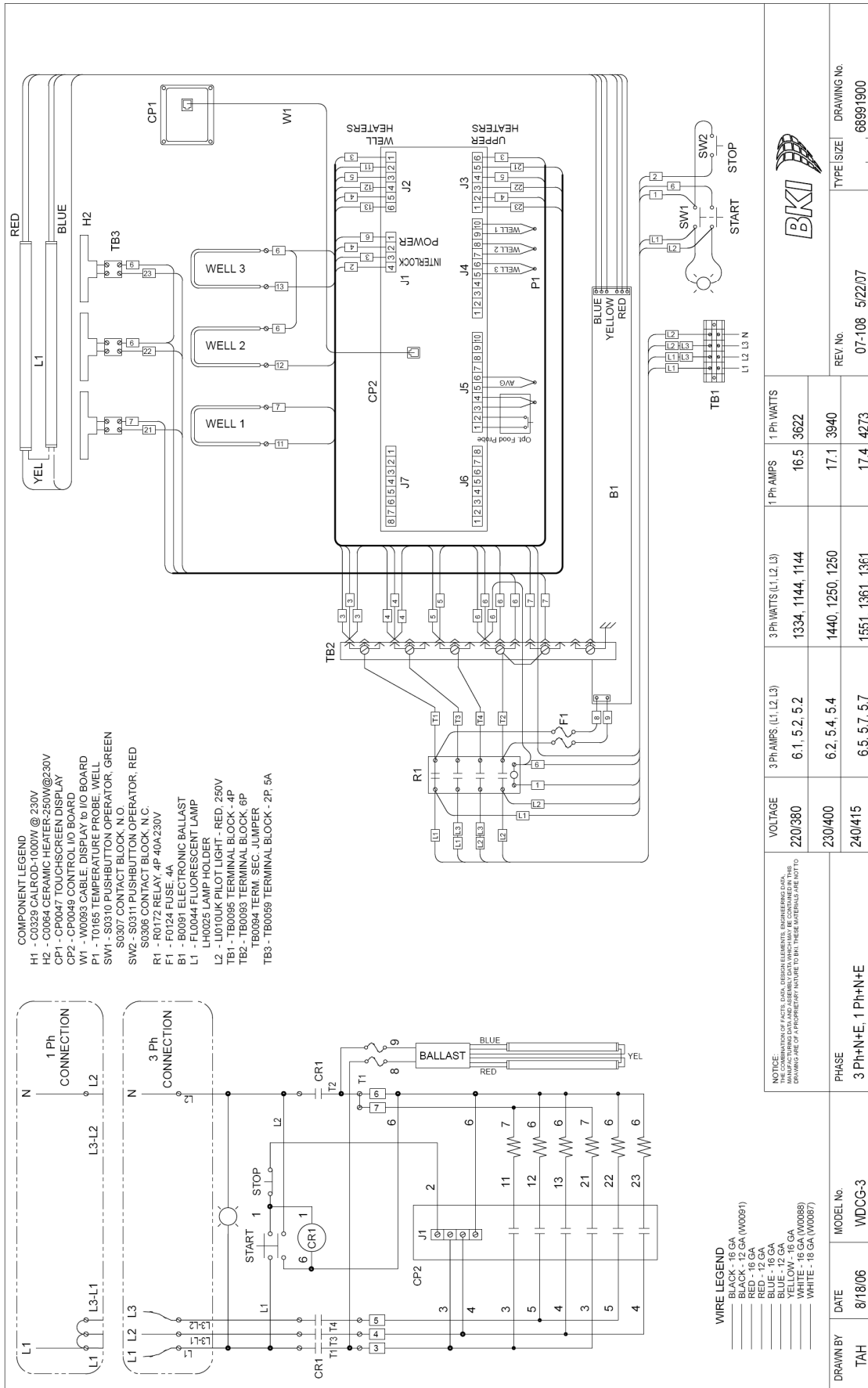
- COMPONENT LEGEND**
- H1 - C0328 CALROD-1000W @ 208V (230V Cases)
 - C0329 CALROD-1000W @ 230V (220 & 240V Cases)
 - H2 - C0057 CERAMIC HEATER-400W@230V (230V Cases)
 - C0064 CERAMIC HEATER-250W@230V (220 & 240V Cases)
 - CP1 - DP0047 TOUCHSCREEN DISPLAY
 - CP2 - DP0049 CONTROL I/O BOARD
 - W1 - W0095 CABLE DISPLAY TO I/O BOARD
 - P1 - T0185 TEMPERATURE PROBE WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - S0307 CONTACT BLOCK, N.O.
 - S0306 CONTACT BLOCK, N.C.
 - R1 - R0172 RELAY, 4P 40A 230V
 - F1 - F0124 FUSE, 4A
 - B1 - B0050 ELECTRONIC BALLAST
 - L1 - L0045 FLUORESCENT LAMP
 - L2 - L0025 LAMP HOLDER
 - T61 - T0006 TERMINAL BLOCK, 6P
 - TB2 - T0093 TERM. SEC. BUMPER
 - TB3 - T0059 TERMINAL BLOCK, 2P, 5A

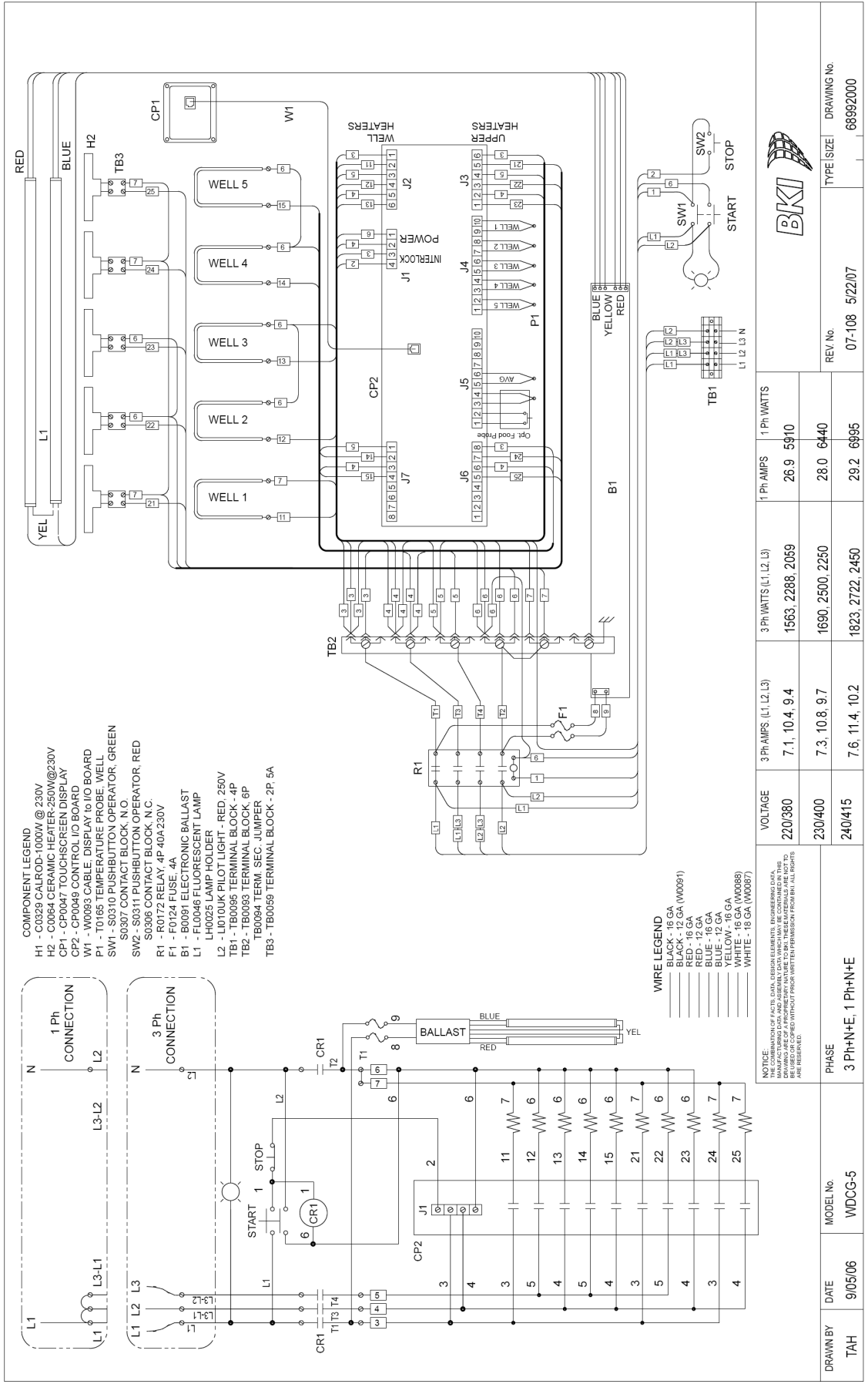
- WIRE LEGEND**
- BLACK - 16 GA
 - BLACK - 12 GA (W0091)
 - RED - 15 GA
 - RED - 12 GA
 - BLUE - 16 GA
 - BLUE - 12 GA
 - YELLOW - 16 GA
 - YELLOW - 12 GA (W0085)
 - WHITE - 18 GA (W0087)

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DRAWN BY	DATE	MODEL No.	PHASE	No. OF WIRES	VOLTAGE	AMPS.	KILOWATTS	BREAKER SIZE	TYPE / SIZE	DRAWING No.
					220	22.7 of 37.5	8.3	30 of 50		
					240	24.6 of 40.7	9.8	35 of 60		

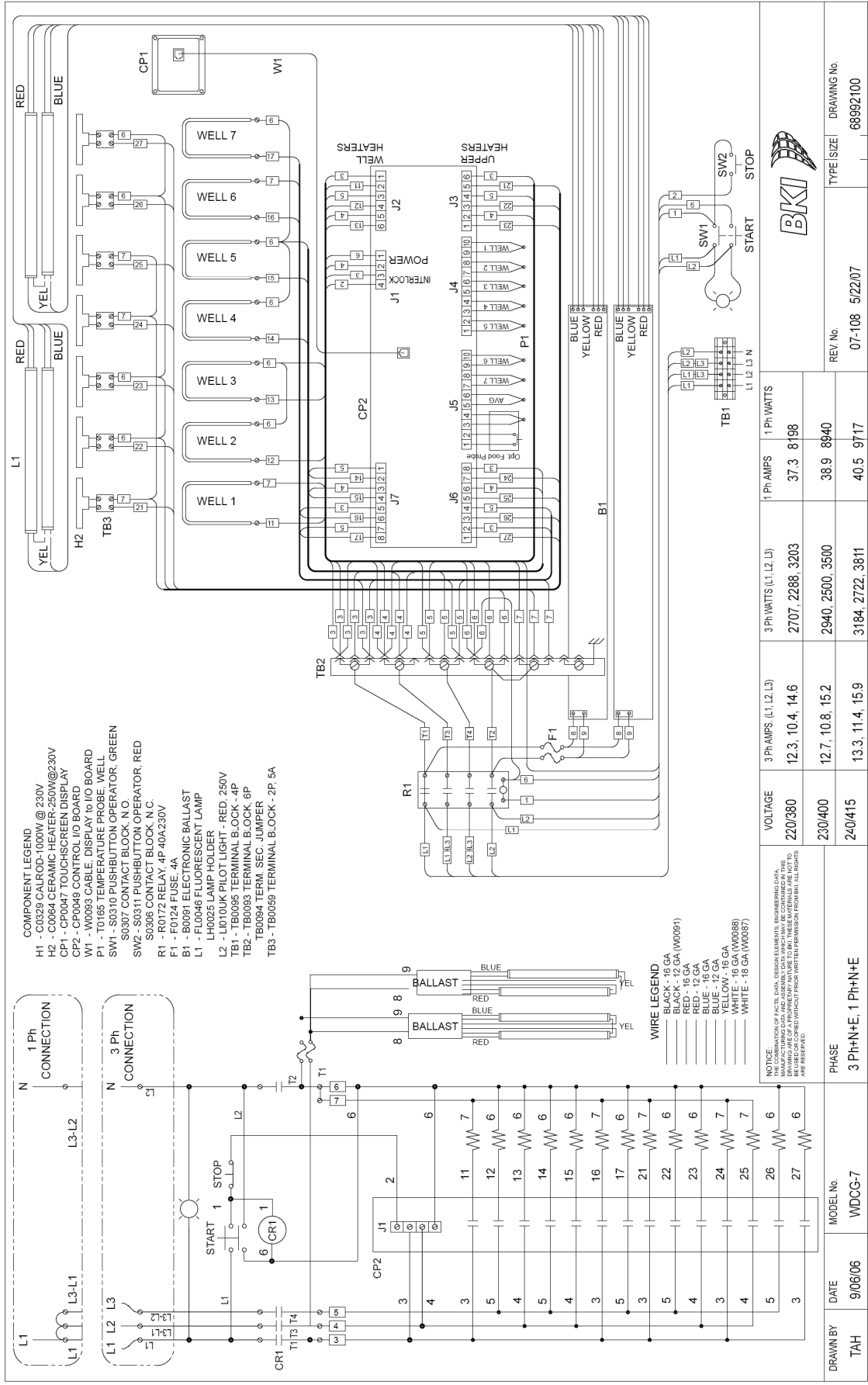






VOLTAGE	3 Ph AMPS (L1, L2, L3)	3 Ph WATTS (L1, L2, L3)	1 Ph AMPS	1 Ph WATTS
220/380	7.1, 10.4, 9.4	1563, 2288, 2059	26.9	5910
230/400	7.3, 10.8, 9.7	1690, 2500, 2250	28.0	6440
240/415	7.6, 11.4, 10.2	1823, 2722, 2450	29.2	6995

DRAWN BY	DATE	MODEL No.	PHASE	REV. No.	TYPE/SIZE	DRAWING No.
TAH	9/05/06	WDCG-5	3 Ph+N+E, 1 Ph+N+E	07-108 5122/07		68992000



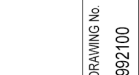
- COMPONENT LEGEND**
- H1 - C0329 CALROD-1000W @ 230V
 - H2 - C0064 CERAMIC HEATER-250W@230V
 - CP1 - CP0047 TOUCHSCREEN DISPLAY
 - CP2 - CP0049 CONTROL I/O BOARD
 - W1 - W0093 CABLE DISPLAY I/O BOARD
 - P1 - T0165 TEMPERATURE PROBE, WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - SW2 - S0311 PUSHBUTTON OPERATOR, RED
 - S0306 CONTACT BLOCK N.C.
 - R1 - R0124 FUSE, 4A
 - F1 - F0124 FUSE, 4A
 - B1 - B0091 ELECTRONIC BALLAST
 - L1 - FL0046 FLUORESCENT LAMP
 - L2 - LH025 LAMP HOLDER
 - L3 - LH010UK PILOT LIGHT - RED, 250V
 - TB1 - TB0095 TERMINAL BLOCK - 4P
 - TB2 - TB0093 TERMINAL BLOCK - 6P
 - TB0094 TERM. SEC. JUMPER
 - TB3 - TB0059 TERMINAL BLOCK - 2P, 5A

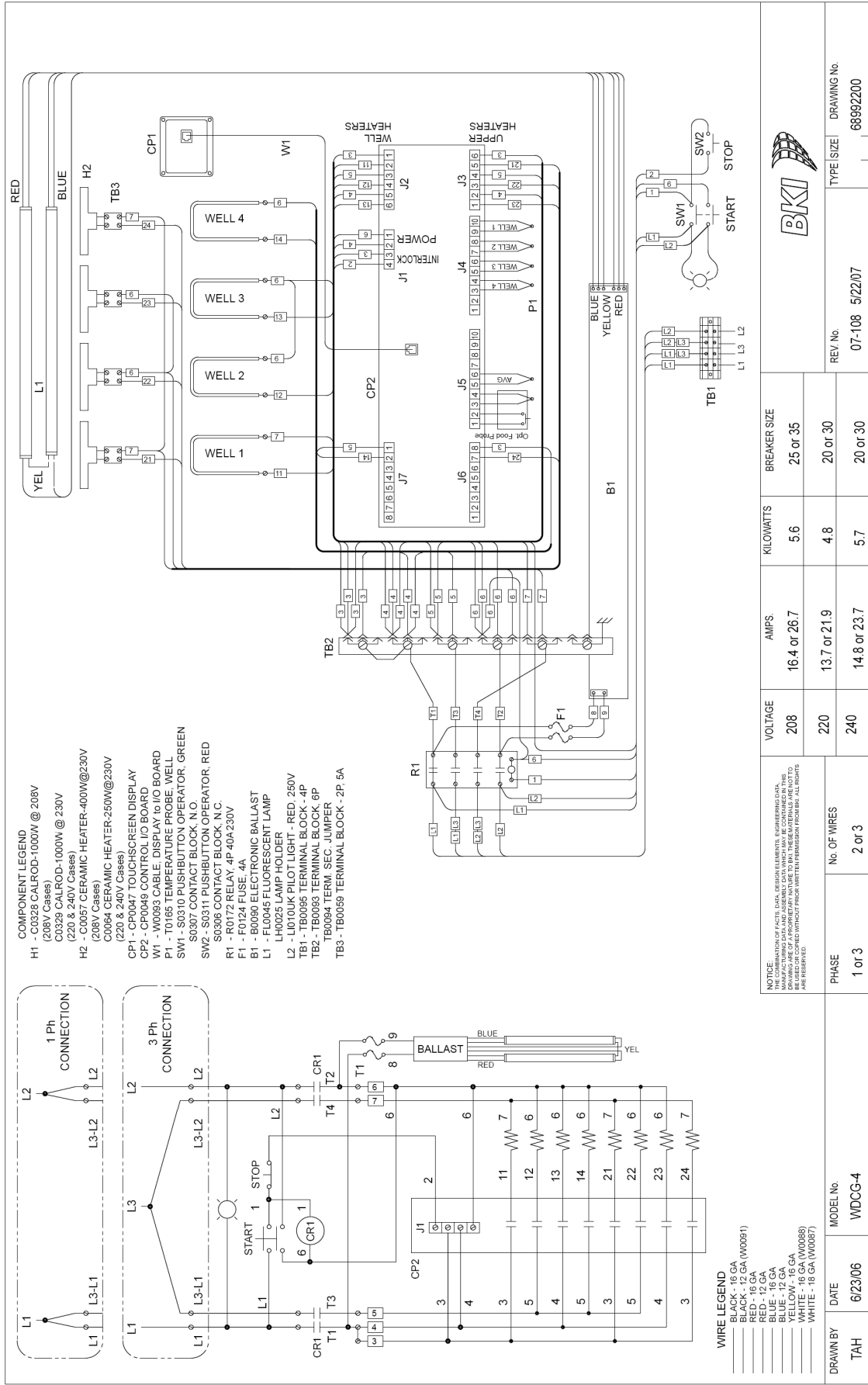
- WIRE LEGEND**
- BLACK - 16 GA (W0081)
 - BLACK - 12 GA (W0081)
 - RED - 16 GA (W0081)
 - RED - 12 GA (W0081)
 - BLUE - 16 GA (W0081)
 - BLUE - 12 GA (W0081)
 - YELLOW - 16 GA (W0088)
 - YELLOW - 12 GA (W0088)
 - WHITE - 18 GA (W0087)

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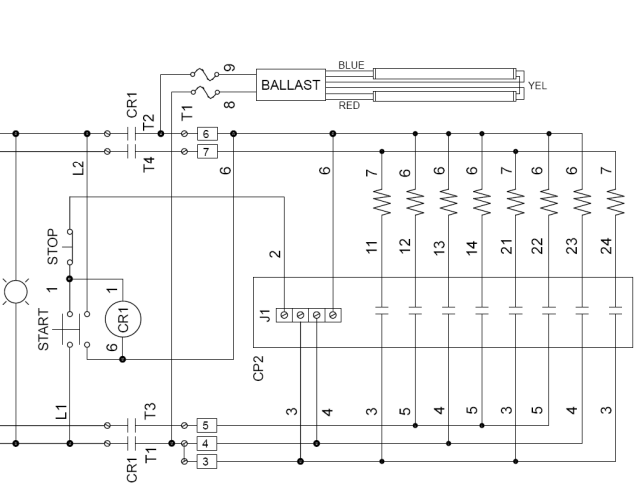
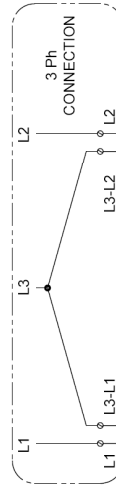
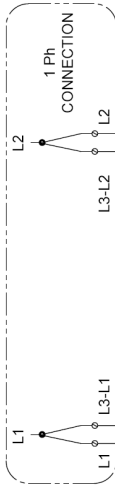
VOLTAGE	3 Ph AMPS (L1, L2, L3)	3 Ph WATTS (L1, L2, L3)	1 Ph WATTS
220/380	12.3, 10.4, 14.6	2707, 2288, 3203	37.3, 8198
230/400	12.7, 10.8, 15.2	2940, 2500, 3500	38.9, 8840
240/415	13.3, 11.4, 15.9	3184, 2722, 3811	40.5, 9717

DATE	MODEL No.	TYPE/SIZE	DRAWING No.
9/06/06	WDCG-7		68992100





- COMPONENT LEGEND**
- H1 - C0328 CALROD-1000W @ 208V (208V Cases)
 - H2 - C0329 CALROD-1000W @ 230V (220 & 240V Cases)
 - H3 - C0057 CERAMIC HEATER-400W@230V (208V Cases)
 - H4 - C0064 CERAMIC HEATER-250W@230V (220 & 240V Cases)
 - CP1 - CP0047 TOUCHSCREEN DISPLAY
 - CP2 - CP0049 CONTROL I/O BOARD
 - W1 - W0093 CABLE, DISPLAY to I/O BOARD
 - P1 - T0165 TEMPERATURE PROBE, WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - SW2 - S0311 PUSHBUTTON OPERATOR, RED
 - R1 - R0172 RELAY, 4P, 40A/230V
 - F1 - F0124 FUSE, 4A
 - B1 - B0090 ELECTRONIC BALLAST
 - L1 - FL0045 FLUORESCENT LAMP
 - L2 - LH0025 LAMP HOLDER
 - L3 - LH0025 PILOT LIGHT - RED, 250V
 - TB1 - TB0095 TERMINAL BLOCK - 4P
 - TB2 - TB0093 TERMINAL BLOCK, 6P
 - TB3 - TB0099 TERMINAL BLOCK - 2P, 5A

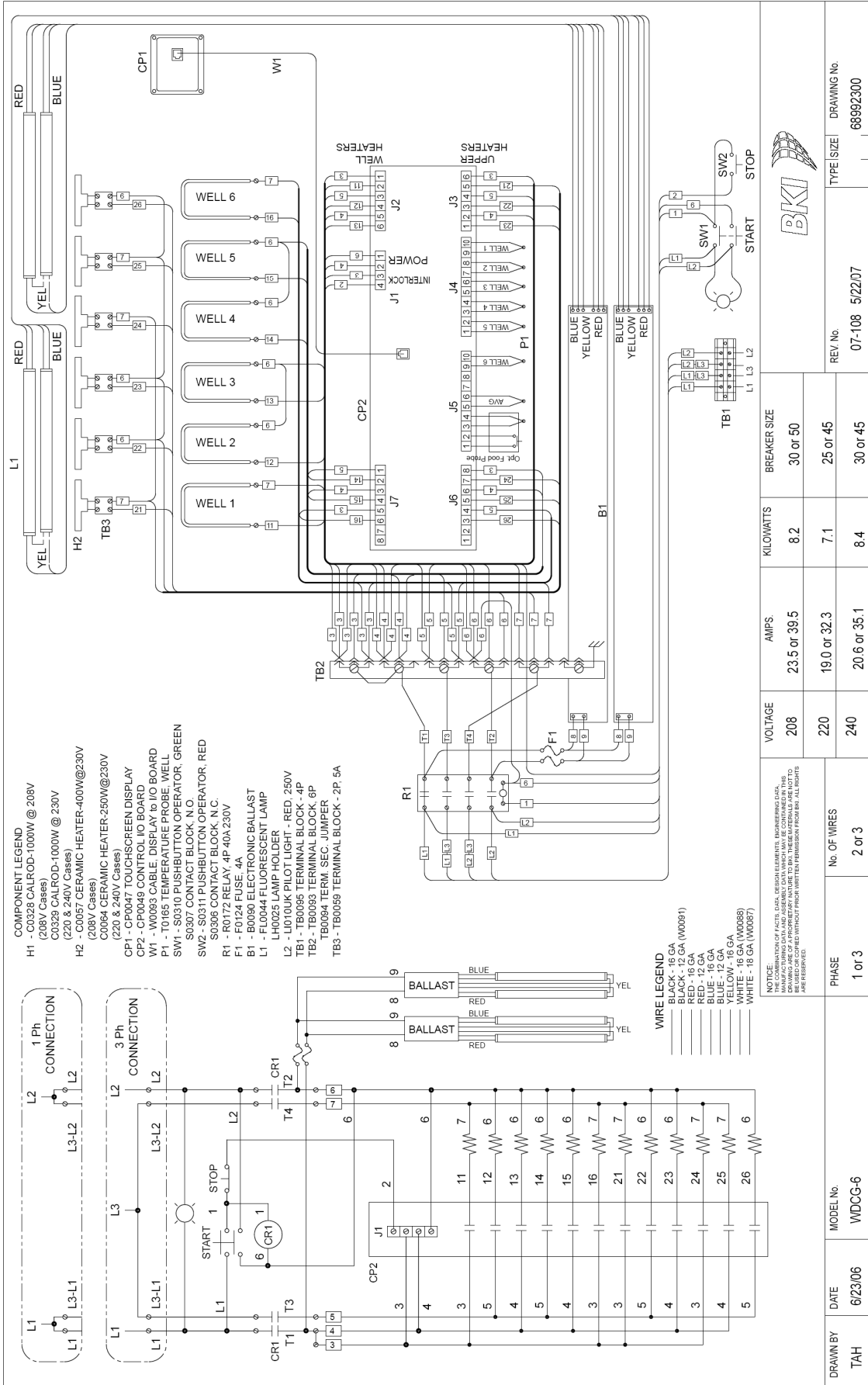


- WIRE LEGEND**
- BLACK - 16 GA
 - BLACK - 12 GA (W0091)
 - RED - 16 GA
 - RED - 12 GA
 - BLUE - 12 GA
 - YELLOW - 16 GA
 - WHITE - 16 GA (W0088)
 - WHITE - 16 GA (W0087)

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DRAWN BY	DATE	MODEL No.	PHASE	No. OF WIRES		VOLTAGE	AMPS	KILOWATTS	BREAKER SIZE		TYPE / SIZE	DRAWING No.
				1 or 3	2 or 3				20 or 30	25 or 35		
TAH	6/23/06	WDCG-4	1 or 3	2 or 3	208	16.4 or 26.7	5.6	25 or 35	20 or 30	20 or 30		
					220	13.7 or 21.9	4.8	20 or 30	20 or 30			
					240	14.8 or 23.7	5.7	20 or 30	20 or 30			

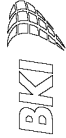


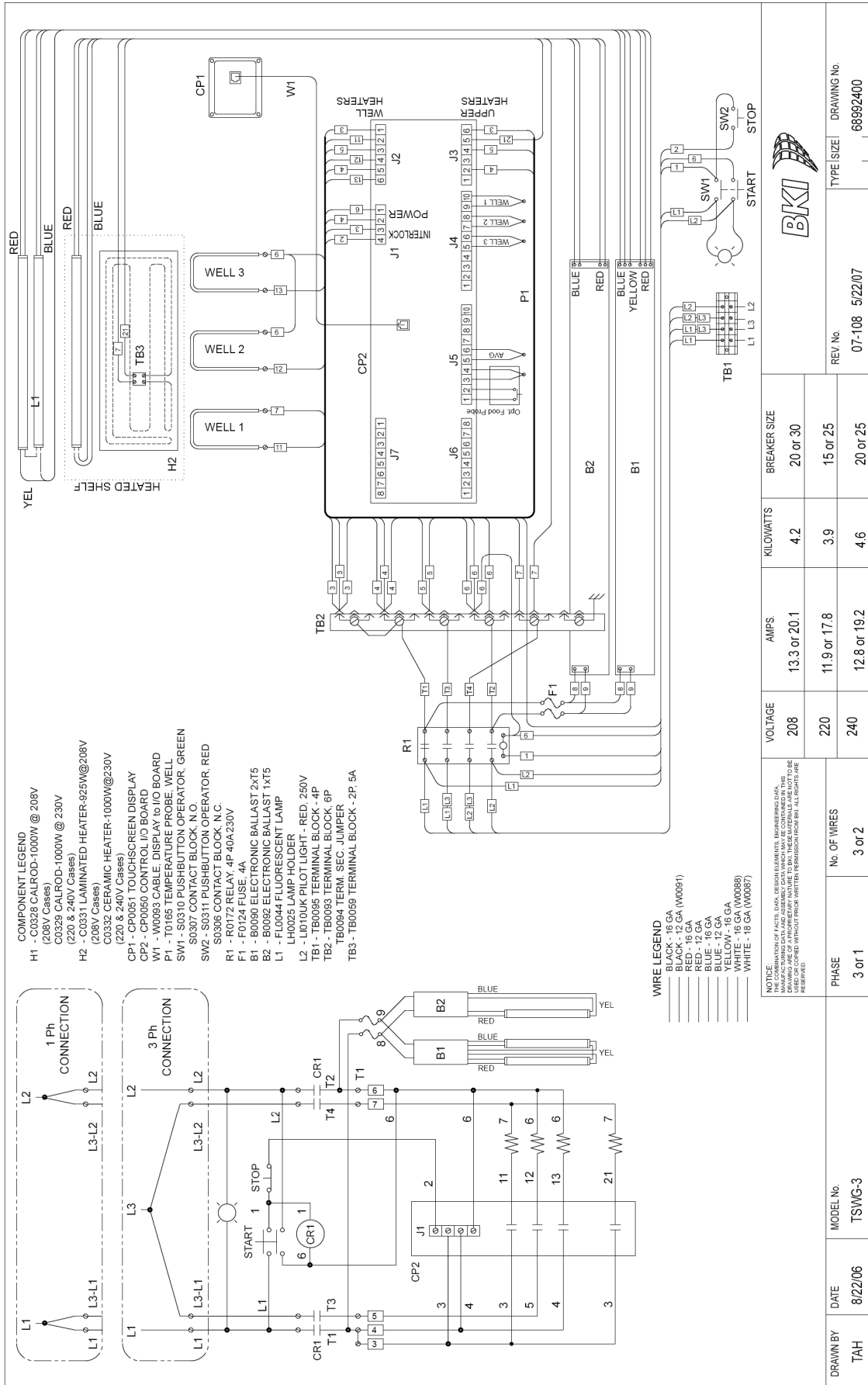
- COMPONENT LEGEND**
- H1 - C0328 CALROD-1000W @ 208V (208V Cases)
 - C0329 CALROD-1000W @ 230V (220 & 240V Cases)
 - H2 - C0057 CERAMIC HEATER-400W@230V (208V Cases)
 - C0064 CERAMIC HEATER-250W@230V (220 & 240V Cases)
 - CP1 - CP0047 TOUCHSCREEN DISPLAY
 - CP2 - CP0049 CONTROL IO BOARD
 - W1 - W0093 CABLE DISPLAY I/O BOARD
 - PH1 - W0065 TEMPERATURE PROBE, WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - S0307 CONTACT BLOCK, 3C
 - S0309 CONTACT BLOCK, 3C
 - F1 - F0124 FUSE, 4A
 - R1 - R0172 RELAY, 4P-40A, 230V
 - LI - F01094 ELECTRONIC BALLAST
>
 - L1 - LH0025 LAMP HOLDER
 - L2 - LU0101K PILOT LIGHT - RED, 250V
 - TB1 - TB0095 TERMINAL BLOCK, 6P
 - TB2 - TB0093 TERMINAL BLOCK, 6P
 - TB0094 TERM. SEC. JUMPER
 - TB3 - TB0059 TERMINAL BLOCK - 2P, 5A

- WIRE LEGEND**
- BLACK - 18 GA (W0081)
 - BLACK - 12 GA (W0081)
 - RED - 18 GA
 - RED - 12 GA
 - BLUE - 18 GA
 - BLUE - 12 GA
 - YELLOW - 18 GA
 - WHITE - 16 GA (W0088)
 - WHITE - 18 GA (W0087)

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DRAWN BY	DATE	MODEL No.	PHASE	No. OF WIRES	VOLTAGE	AMPS	KILOWATTS	BREAKER SIZE	REV. No.		TYPE SIZE	DRAWING No.
									07-108	5/22/07		
TAH	6/23/06	WDCCG-6	1 or 3	2 or 3	208	23.5 or 39.5	8.2	30 or 50	30 or 45	68992300		
					220	19.0 or 32.3	7.1	25 or 45	30 or 45			
					240	20.6 or 35.1	8.4	30 or 45				





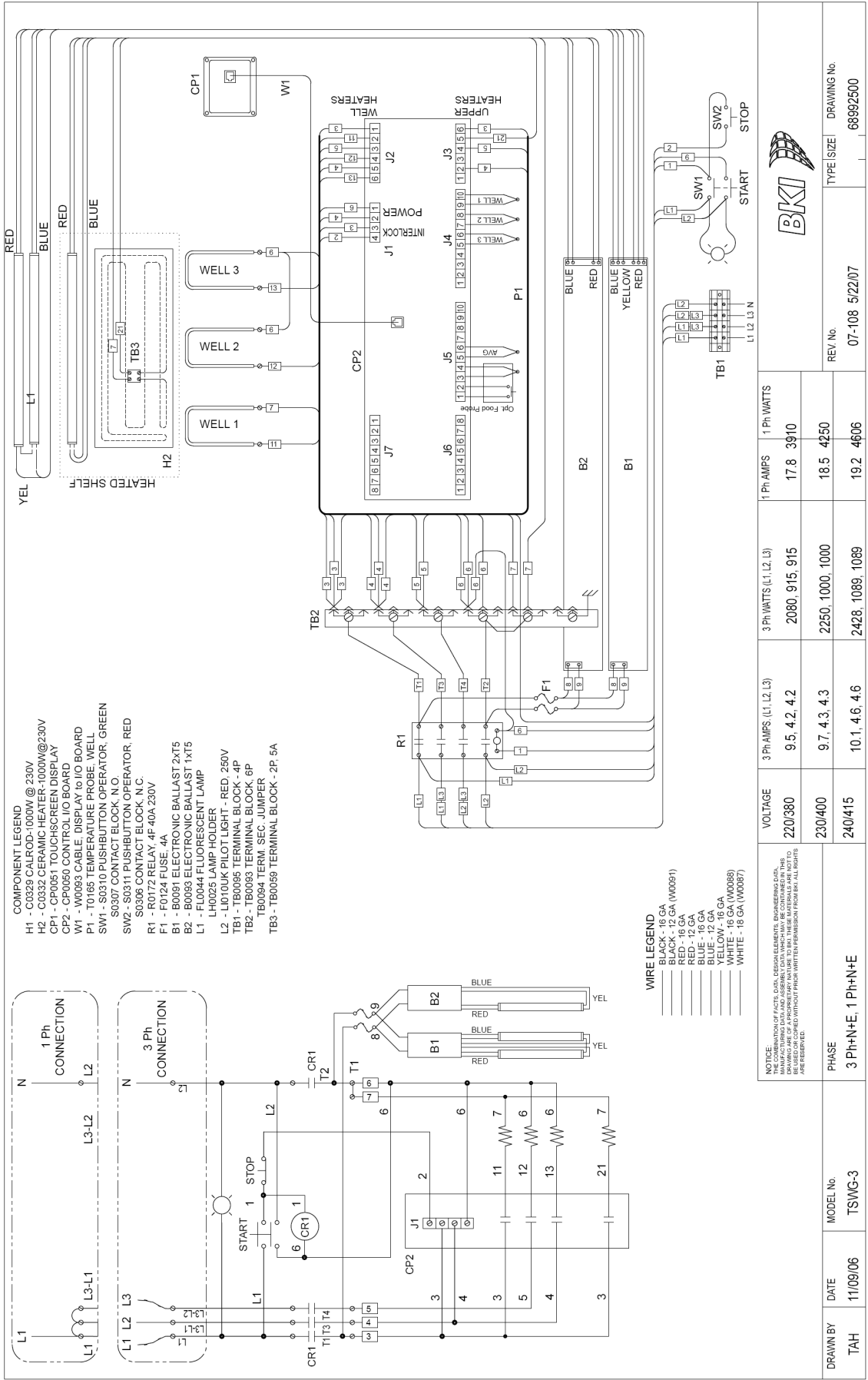
- COMPONENT LEGEND**
- H1 - C0328 CALROD-1000W @ 208V (208V Cases)
 - C0329 CALROD-1000W @ 230V (220 & 240V Cases)
 - H2 - C0331 LAMINATED HEATER-925W@208V (208V Cases)
 - C0332 CERAMIC HEATER-1000W@230V (220 & 240V Cases)
 - CP1 - CP0051 TOUCHSCREEN DISPLAY
 - CP2 - CP0050 CONTROL I/O BOARD
 - W1 - W0093 CABLE DISPLAY TO I/O BOARD
 - P1 - T0165 TEMPERATURE PROBE, WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - S0307 CONTACT BLOCK, N.O.
 - SW2 - S0311 PUSHBUTTON OPERATOR, RED
 - S0308 CONTACT BLOCK, N.C.
 - R1 - R0172 RELAY, 4P 40A230V
 - F1 - F0124 FUSE, 4A
 - B1 - B0090 ELECTRONIC BALLAST 2X15
 - B2 - B0092 ELECTRONIC BALLAST 1X15
 - L1 - FL0044 FLUORESCENT LAMP
 - LH0025 LAMP HOLDER
 - L2 - LH0100K PILOT LIGHT - RED, 250V
 - TB1 - TB0095 TERMINAL BLOCK - 4P
 - TB2 - TB0093 TERMINAL BLOCK, 6P
 - TB0084 TERM. SEC. JUMPER
 - TB3 - TB0069 TERMINAL BLOCK - 2P, 5A

- WIRE LEGEND**
- BLACK - 16 GA
 - BLACK - 12 GA (W0091)
 - RED - 16 GA
 - RED - 12 GA
 - BLUE - 16 GA
 - BLUE - 12 GA
 - YELLOW - 16 GA
 - WHITE - 16 GA (W0088)
 - WHITE - 18 GA (W0087)

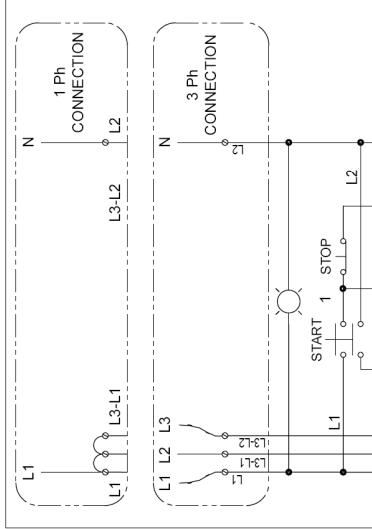
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DRAWN BY TAH	DATE 8/22/06	MODEL No. TSWG-3	PHASE 3 or 1	No. of WIRES 3 or 2	VOLTAGE 208	AMPS 13.3 or 20.1	KILOWATTS 4.2	BREAKER SIZE 20 or 30	REV. No. 07-108 5/22/07	TYPE/SIZE 68892400	DRAWING No. 68892400
					220	11.9 or 17.8	3.9	15 or 25			
					240	12.8 or 19.2	4.6	20 or 25			





- COMPONENT LEGEND**
- H1 - C0329 CALROD-1000W @ 230V
 - H2 - C0332 CERAMIC HEATER-1000W@230V
 - CP1 - CP0051 TOUCHSCREEN DISPLAY
 - CP2 - CP0050 CONTROL I/O BOARD
 - W1 - W0063 CABLE DISPLAY TO I/O BOARD
 - P1 - T0165 TEMPERATURE PROBE WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - SW2 - S0311 PUSHBUTTON OPERATOR, RED
 - S0306 CONTACT BLOCK, N.C.
 - R1 - R0172 RELAY 4F 40A 230V
 - F1 - F0124 FUSE 4A
 - B1 - B0091 ELECTRONIC BALLAST 1X15
 - B2 - B0093 ELECTRONIC BALLAST 1X15
 - L1 - FL0044 FLUORESCENT LAMP
 - LH0025 LAMP HOLDER
 - L2 - LH010UK PILOT LIGHT - RED 250V
 - TB1 - TB0095 TERMINAL BLOCK - 4P
 - TB2 - TB0093 TERMINAL BLOCK - 6P
 - TB0094 TERM. SEC. JUMPER
 - TB3 - TB0059 TERMINAL BLOCK - 2P, 5A

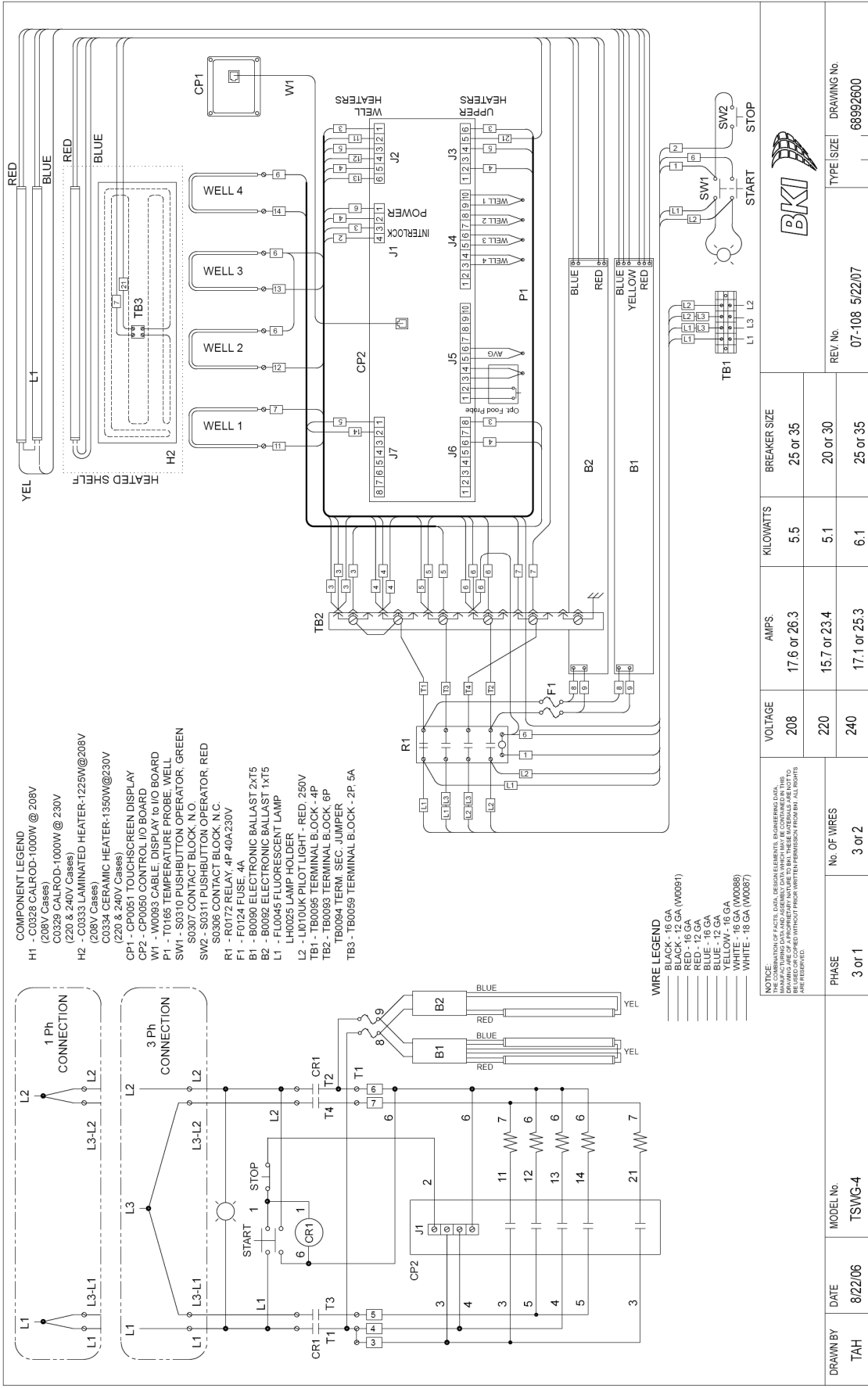


- WIRE LEGEND**
- BLACK - 18 GA
 - BLACK - 12 GA (W0091)
 - RED - 12 GA
 - RED - 16 GA
 - BLUE - 16 GA
 - BLUE - 12 GA
 - YELLOW - 18 GA (W0088)
 - WHITE - 18 GA (W0087)

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DRAWN BY	DATE	MODEL No.	PHASE	VOLTAGE			3 Ph AMPS (L1, L2, L3)			1 Ph WATTS			TYPE/SIZE	DRAWING No.
				220/380	9.5, 4.2, 4.2	2080, 915, 915	17.8, 3910	1 Ph AMPS	1 Ph WATTS	REV. No.				
TAH	11/09/06	TSWG-3	3 Ph+N+E, 1 Ph+N+E	230/400	9.7, 4.3, 4.3	2250, 1000, 1000	18.5, 4250	07-108	5/22/07	68992500				
				240/415	10.1, 4.6, 4.6	2428, 1089, 1089	19.2, 4606							





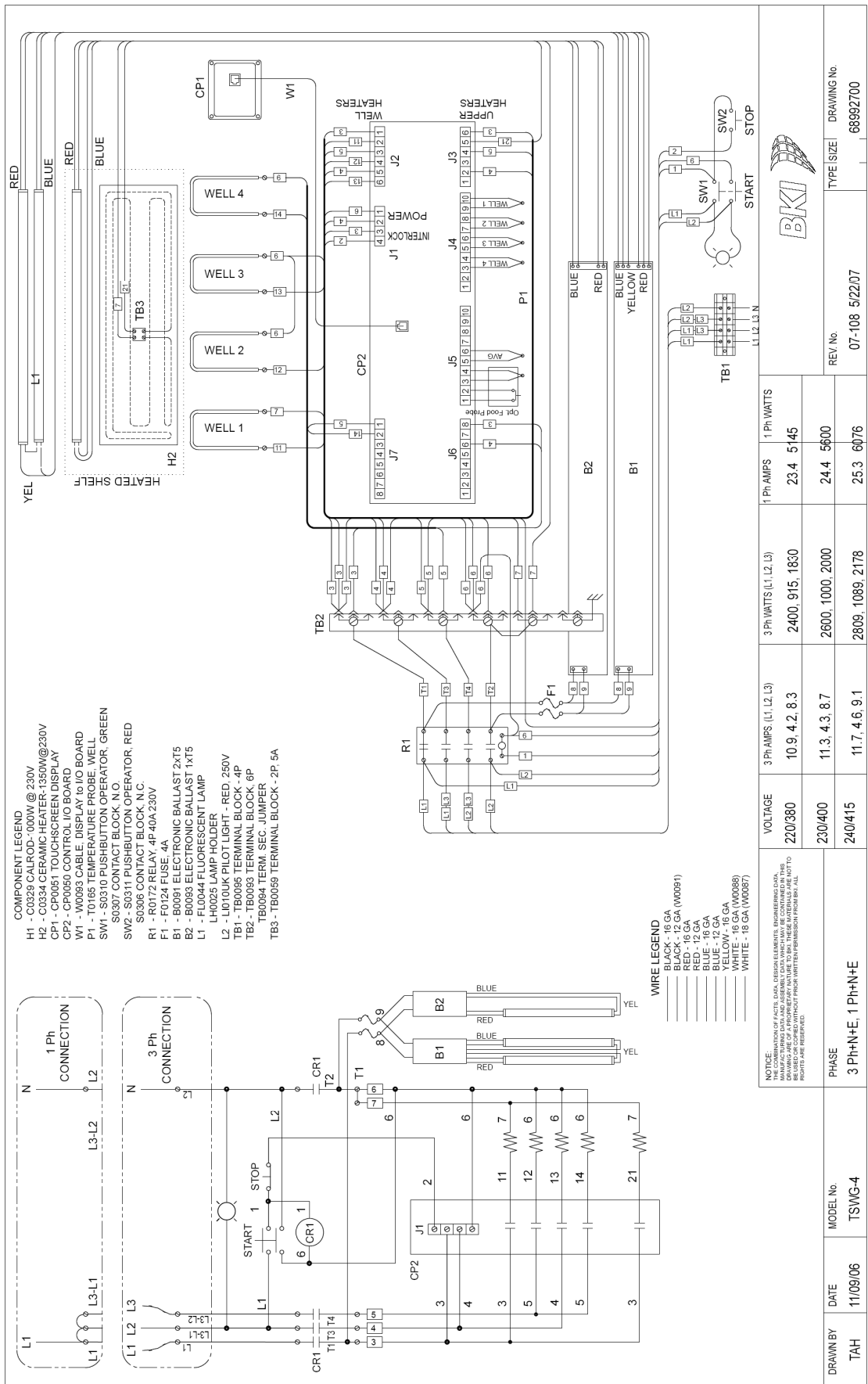
- COMPONENT LEGEND**
- H1 - C0328 CALROD-1000W @ 208V (208V Cases)
 - C0329 CALROD-1000W @ 230V (220 & 240V Cases)
 - H2 - C0333 LAMINATED HEATER-1225W@208V (208V Cases)
 - C0334 CERAMIC HEATER-1350W@230V (220 & 240V Cases)
 - CP1 - CP0051 TOUCHSCREEN DISPLAY
 - CP2 - CP0050 CONTROL I/O BOARD
 - W1 - W0093 CABLE, DISPLAY TO I/O BOARD
 - P1 - T0165 TEMPERATURE PROBE, WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - S0307 CONTACT BLOCK, N.O.
 - S0311 PUSHBUTTON OPERATOR, RED
 - S0306 CONTACT BLOCK, N.C.
 - R1 - R0172 RELAY, 4P 40A230V
 - F1 - F0124 FUSE, 4A
 - B1 - B0090 ELECTRONIC BALLAST 2X15
 - B2 - B0092 ELECTRONIC BALLAST 1X15
 - L1 - FL0045 FLUORESCENT LAMP
 - LH0025 LAMP HOLDER
 - L2 - LH0100K PILOT LIGHT - RED, 250V
 - TB1 - TB0085 TERMINAL BLOCK - 4P
 - TB2 - TB0093 TERMINAL BLOCK, 6P
 - TB0094 TERM. SEC. JUMPER
 - TB3 - TB0059 TERMINAL BLOCK - 2P, 5A

- WIRE LEGEND**
- BLACK - 16 GA
 - BLACK - 12 GA (W0091)
 - RED - 12 GA
 - RED - 12 GA
 - BLUE - 16 GA
 - BLUE - 12 GA
 - YELLOW - 16 GA (W0098)
 - WHITE - 18 GA (W0087)

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DRAWN BY	DATE	MODEL No.	PHASE	No. OF WIRES	VOLTAGE	AMPS	KILOWATTS	BREAKER SIZE	REV No.		TYPE SIZE	DRAWING No.
									07-108	5/22/07		
TAH	8/22/06	TSMG-4	3 or 1	3 or 2	208	17.6 or 26.3	5.5	25 or 35				
					220	15.7 or 23.4	5.1	20 or 30				
					240	17.1 or 25.3	6.1	25 or 35				





- COMPONENT LEGEND**
- H1 - C0329 CALROD-0000W @ 230V
 - H2 - C0334 CERAMIC HEATER-1350W@230V
 - CP1 - CP0051 TOUCHSCREEN DISPLAY
 - CP2 - CP0050 CONTROL I/O BOARD
 - W1 - W0093 CABLE, DISPLAY TO I/O BOARD
 - P1 - T0165 TEMPERATURE PROBE, WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - SW2 - S0311 PUSHBUTTON OPERATOR, RED
 - S0306 CONTACT BLOCK, N.C.
 - R1 - R0172 RELAY, 4P 40A 230V
 - F1 - F0124 FUSE, 4A
 - B1 - B0081 ELECTRONIC BALLAST 2xT5
 - B2 - B0083 ELECTRONIC BALLAST 1xT5
 - L1 - FL0044 FLUORESCENT LAMP
 - LH0025 LAMP HOLDER
 - L2 - L1070UK PILOT LIGHT - RED, 250V
 - TB1 - TB0085 TERMINAL BLOCK -4P
 - TB2 - TB0095 TERMINAL BLOCK 6P
 - TB3 - TB0068 TERMINAL BLOCK -2P, 5A

- WIRE LEGEND**
- BLACK - 16 GA
 - BLACK - 12 GA (W0091)
 - RED - 16 GA
 - RED - 12 GA
 - BLUE - 16 GA
 - BLUE - 12 GA
 - WHITE - 16 GA (W0088)
 - WHITE - 18 GA (W0087)

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VOLTAGE	3 Ph AMPS (L1, L2, L3)	3 Ph WATTS (L1, L2, L3)	1 Ph AMPS	1 Ph WATTS
220/380	10.9, 4.2, 8.3	2400, 915, 1830	23.4	5145
230/400	11.3, 4.3, 8.7	2600, 1000, 2000	24.4	5600
240/415	11.7, 4.6, 9.1	2809, 1089, 2178	25.3	6076

PHASE
3 Ph-N+E, 1 Ph-N+E

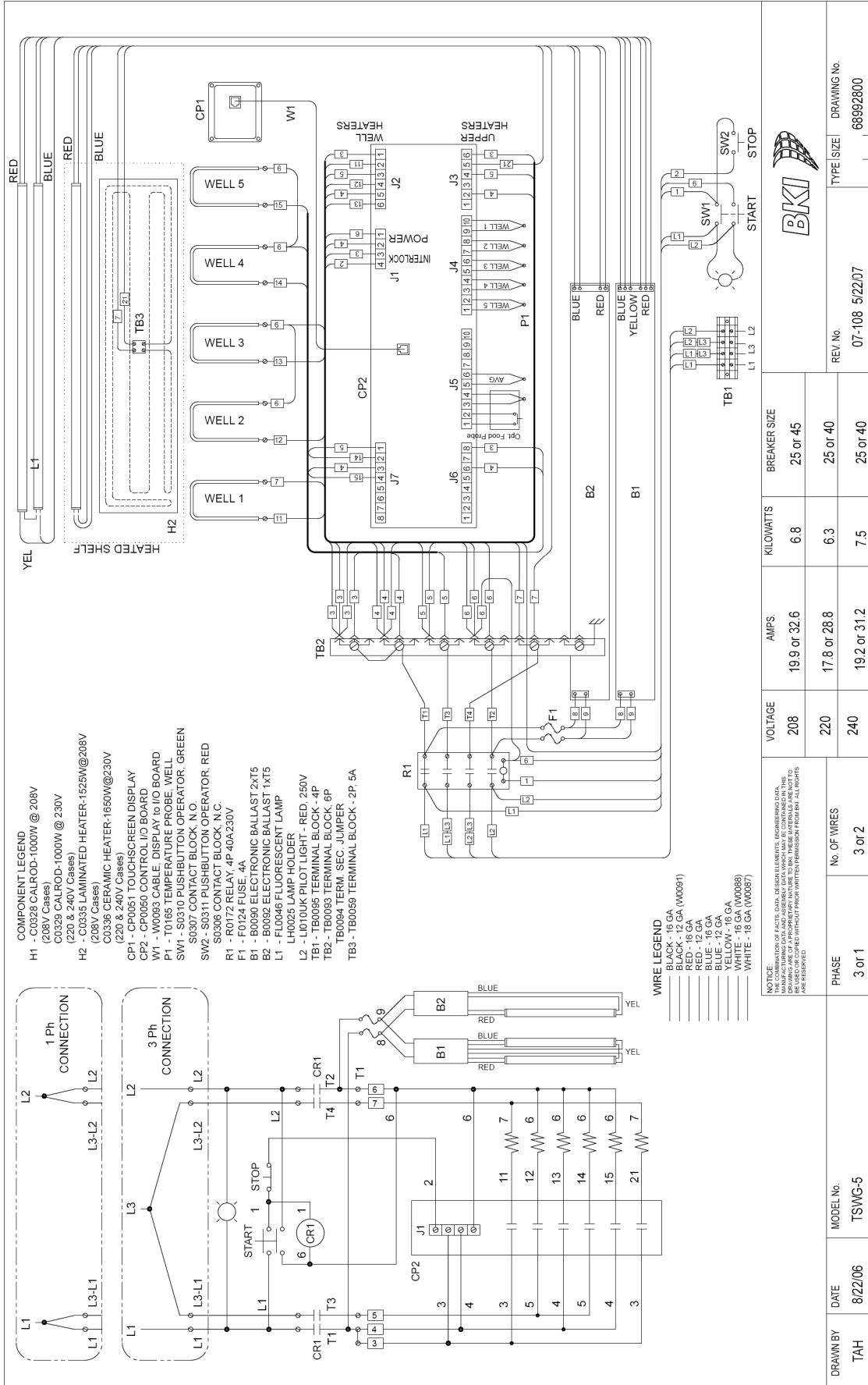
MODEL No.
TSWG-4

DATE
11/09/06

DRAWN BY
TAH

REV. No.
07-108 5/22/07

TYPE SIZE
DRAWING No.
68992700



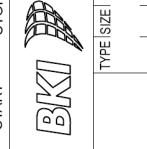
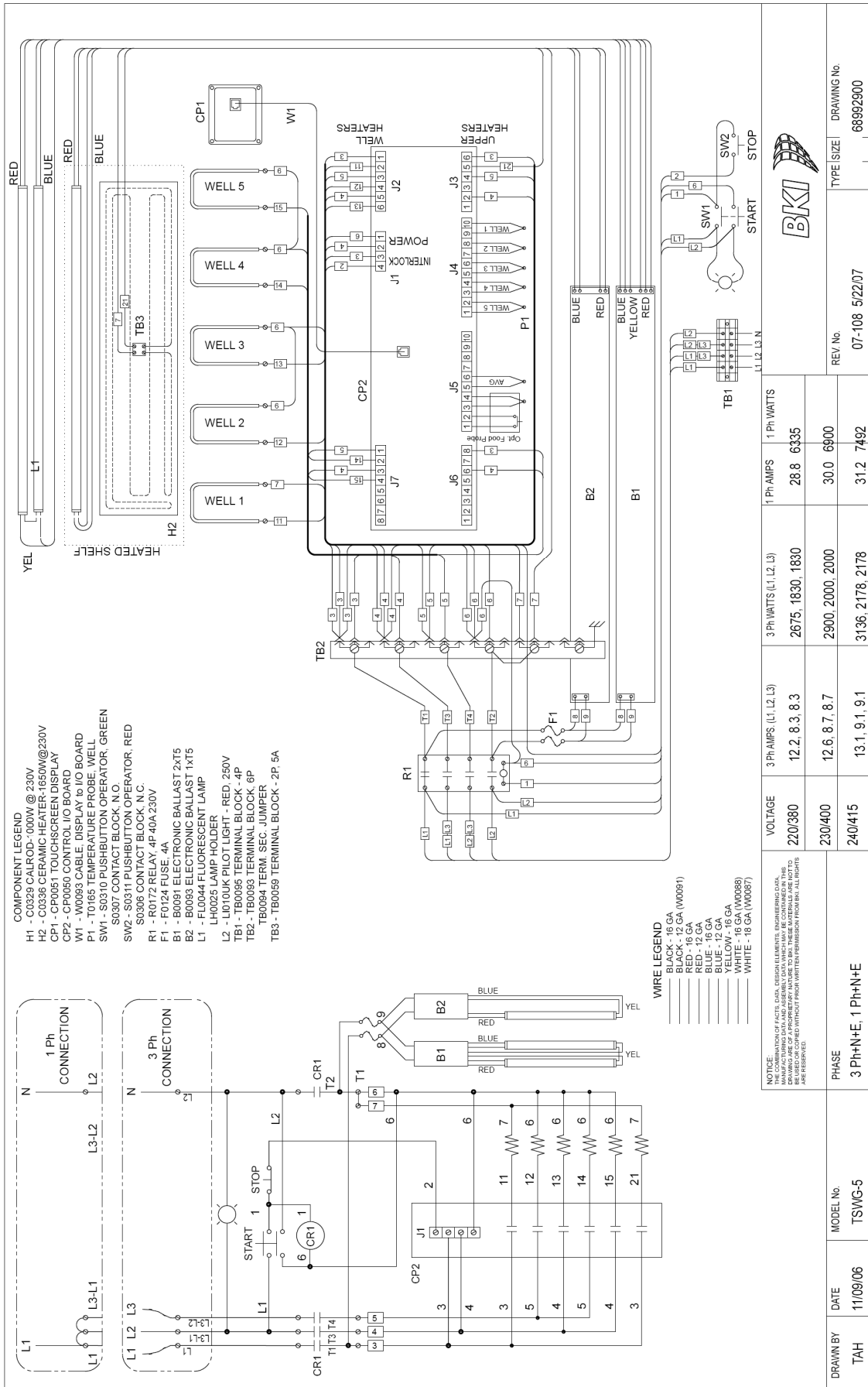
- COMPONENT LEGEND**
- H1 - C0328 CALROD-1000W @ 208V (208V Cases)
 - C0329 CALROD-1000W @ 230V (220 & 240V Cases)
 - H2 - C0335 LAMINATED HEATER-1525W@208V (208V Cases)
 - C0336 CERAMIC HEATER-1650W@230V (220 & 240V Cases)
 - CP1 - CP051 TOUCHSCREEN DISPLAY
 - CP2 - CP050 CONTROL I/O BOARD
 - W1 - W0083 CABLE DISPLAY I/O BOARD
 - P1 - T0165 TEMPERATURE PROBE, WELL
 - SW1 - S0310 PUSHBUTTON OPERATOR, GREEN
 - S0307 CONTACT BLOCK, N.O.
 - SW2 - S0311 PUSHBUTTON OPERATOR, RED
 - S0306 CONTACT BLOCK, N.C.
 - R1 - R0172 RELAY, 4P 40A230V
 - F1 - F0124 FUSE, 4A
 - B1 - B0090 ELECTRONIC BALLAST 2xT5
 - B2 - B0092 ELECTRONIC BALLAST 1xT5
 - L1 - FLO046 FLUORESCENT LAMP
 - LH025 LAMP HOLDER
 - L2 - LH0100K PILOT LIGHT - RED, 250V
 - TB1 - TB0085 TERMINAL BLOCK - 4P
 - TB2 - TB0095 TERMINAL BLOCK, 6P
 - TB094 TERM. SEC. JUMPER
 - TB3 - TB0059 TERMINAL BLOCK - 2P, 5A

- WIRE LEGEND**
- BLACK - 16 GA
 - BLACK - 12 GA (W0091)
 - RED - 16 GA
 - RED - 12 GA
 - BLUE - 16 GA
 - BLUE - 12 GA
 - YELLOW - 16 GA (W0088)
 - WHITE - 16 GA (W0087)

NOTICE
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DRAWN BY	DATE	MODEL No.	PHASE	No. OF WIRES	VOLTAGE	AMPS	KILOWATTS	BREAKER SIZE	REV No		TYPE SIZE	DRAWING No.
									07-108	5/22/07		
TAH	8/22/06	TSWG-5	3 or 1	3 or 2	208	19.9 or 32.6	6.8	25 or 45				
					220	17.8 or 28.8	6.3	25 or 40				
					240	19.2 or 31.2	7.5	25 or 40				





REV. No. 07-108 5/22/07

TYPE/SIZE DRAWING No. 68992900

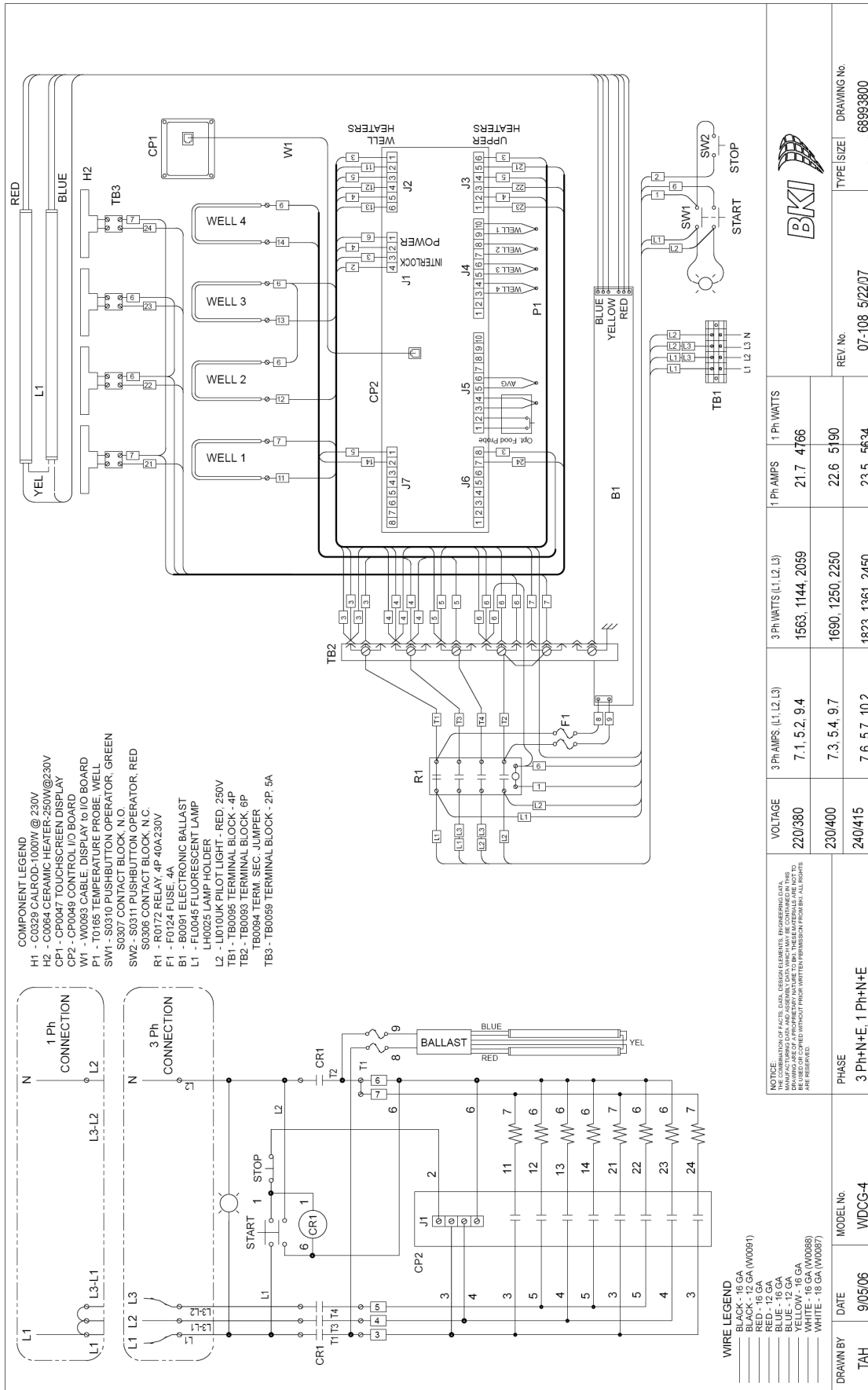
VOLTAGE	3 Ph AMPS (L1, L2, L3)	3 Ph WATTS (L1, L2, L3)	1 Ph AMPS	1 Ph WATTS
220/380	12.2, 8.3, 8.3	2675, 1830, 1830	28.8	6335
230/400	12.6, 8.7, 8.7	2900, 2000, 2000	30.0	6900
240/415	13.1, 9.1, 9.1	3136, 2178, 2178	31.2	7482

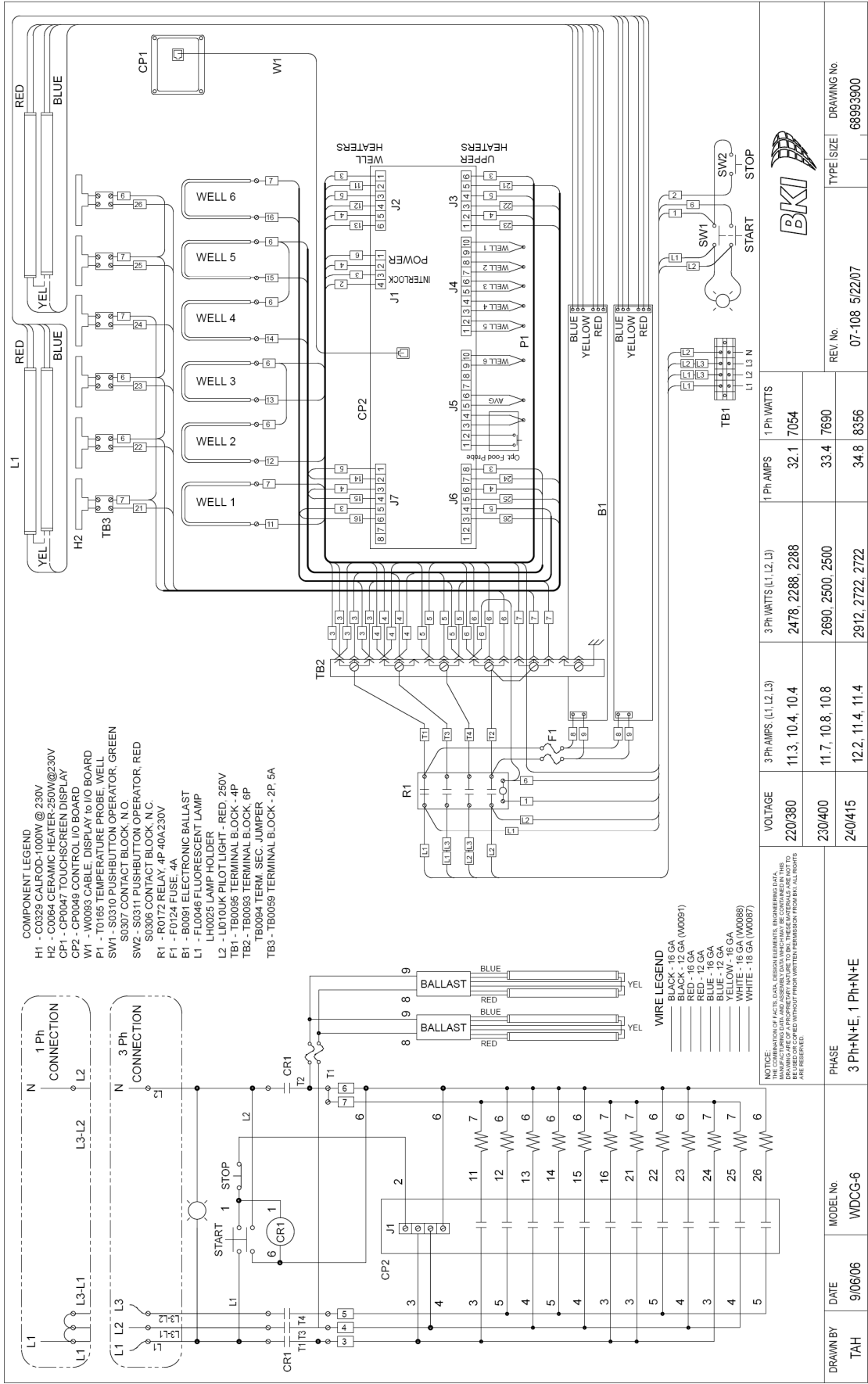
PHASE 3 Ph+N+E, 1 Ph+N+E

MODEL No. TSMC-5

DATE 11/09/06

DRAWN BY TAH





TYPE SIZE
DRAWING No.
68993900

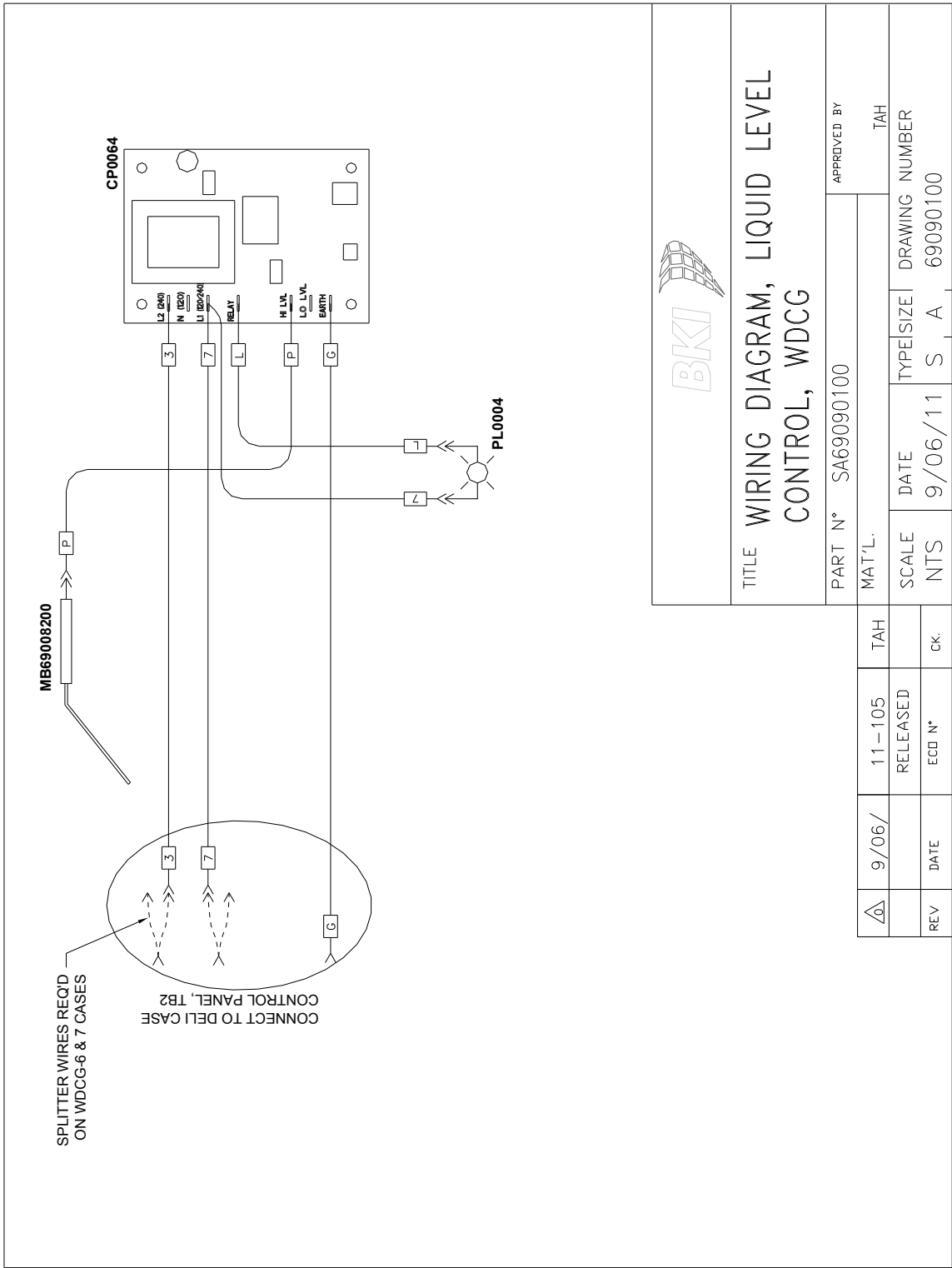
REV. No.
07-108 5/22/07

PHASE
3 Ph+N+E, 1 Ph+N-E

DATE
9/06/06

MODEL No.
WDCG-6

DRAWN BY
TAH



TITLE WIRING DIAGRAM, LIQUID LEVEL CONTROL, WDCG

PART N° SA69090100		APPROVED BY	
MAT'L.		TAH	
SCALE	DATE	TYPE/SIZE	DRAWING NUMBER
NTS	9/06/11	S A	69090100
REV	DATE	ECC N°	CK.
△	9/06/	11-105	TAH
		RELEASED	

Notes



2812 Grandview Drive, Simpsonville, S.C. 29680, USA
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